MAY 1960

Traffic Safety

A NATIONAL SAFETY COUNCIL PUBLICATION

Pacific Telephone Calls all Drivers

Neyhart Asks:

ARE WE ROLLING- OR IN A RUT?

See Page 8

"SATURATION PATROLS" Work in Minnesota

What is Value in an automobile?

It's what YOU want... and get... in the Ford Family of Fine Cars

Quiz a dozen people about value in an automobile and you're likely to get a dozen different answers. Value is a personal measure. Like beauty, it's entirely "in the eyes of the beholder."

Value is styling—to some. A look of distinction. Pleasing proportions. The tasteful use of chrome. Styling as you'll find it in the 1960 Ford, Falcon, Mercury, Lincoln and Lincoln Continental.

Value is performance. A smooth ride. Ease of handling with the accent on mechanical controls. Minimum maintenance over the miles and years. The kind of performance Ford Motor Company cars have made famous.

Value is economy. Efficiency that wrings top mileage out of every drop of fuel. Dependable, thrifty operation from hard-working parts. Savings such as you've come to expect even from the mightiest of Ford Motor Company V-8 engines.

Value, of course, is much more, too. Extra comfort. Added convenience. High trade-in allowance. All these are "dividends" enjoyed by owners of our products.

What is value in an automobile? It's what *you* want—and get—in the Ford Family of Fine Cars.

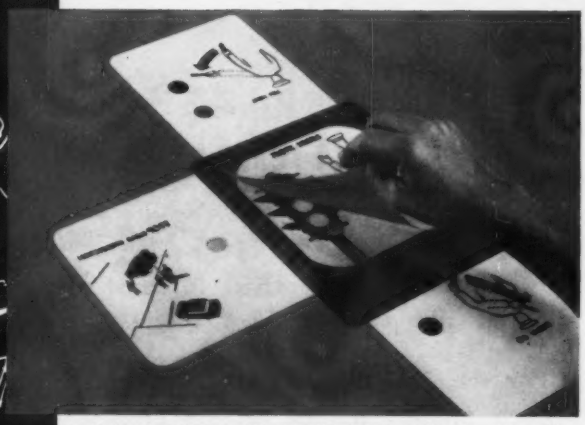
FORD MOTOR COMPANY
The American Road • Dearborn, Mich.

THE FORD FAMILY OF FINE CARS

FORD • FALCON • THUNDERBIRD • COMET • MERCURY • LINCOLN • LINCOLN CONTINENTAL

Circle Item No. 1—Reader Service Card

THE DRIVER SAFETY TRANSPARENCY SERIES



TRANSPARENCIES, WITH OVERLAYS, MAY BE WRITTEN UPON WITH A CHINA MARKING PENCIL TO INTRODUCE NEW OR SUPPLEMENTARY IDEAS DURING THE DISCUSSION.

AN EXCITING NEW APPROACH TO DRIVER TRAINING AND SAFETY EDUCATION

Positive attitudes toward highway safety are successfully developed via this completely new visual training approach never before utilized in the driver training field.

The DRIVER SAFETY TRANSPARENCY SERIES is a complete, effective and amazingly versatile training program presented with an overhead projector. *It is invaluable for initial training, re-training and attitudinal training of teen-age, adult and professional drivers.*

The DRIVER SAFETY TRANSPARENCY SERIES utilizes large, heavy gauge multi-colored plastic transparencies with attached overlays to illustrate progressive traffic situations and safe driving techniques. Overhead projection, from the front of the room, enables instructors to face audiences, conduct group discussion and observe reactions.

Educational institutions, industry, insurance companies, government agencies, the armed forces, civic groups and others interested in promoting highway safety will find the DRIVER SAFETY TRANSPARENCY SERIES to be an indispensable new addition to their driver safety training programs or driver education classes.

For complete information and illustrated literature, write to . . .

THE COMPLETE SET INCLUDES 106 BASIC TRANSPARENCIES, 144 OVERLAYS, DETAILED INSTRUCTION MANUAL AND STURDY CARRYING CASE.

PORTO-CLINIC INSTRUMENTS INC

298 BROADWAY • NEW YORK 7, N.Y. • WORTH 2-4974

Circle Item No. 2—Reader Service Card

FOR SAFER SCHOOL BUS OPERATIONS

THE NATIONAL SAFETY COUNCIL

SCHOOL BUS SAFETY SERVICE

A newly revised service to assist school organizations establish effective driver safety programs.

For the individual driver: provides "Safe Driver Magazine" and "Driver Letter" each month; makes drivers eligible for NSC Safe Driver Awards . . . "Nation's highest award for professional safe driving performance."

For the school bus supervisor: provides manual on organization of safety program, school bus safety newsletter, and other literature pertaining to safe school bus operation.

Write today for brochure and sample copies of material on this service that can help you achieve safer school bus operations.

Write to NATIONAL SAFETY COUNCIL, 425 N. Michigan Ave., Chicago 11, Ill.

PLEASE SEND ME A DESCRIPTIVE BROCHURE AND SAMPLE COPIES OF MATERIALS INCLUDED IN THE SCHOOL BUS SAFETY SERVICE.

Name_____ **Title**_____

Organization_____

Address_____

City_____ **Zone**____ **State**_____

Number of drivers_____

Traffic Safety

Volume 56 Number 5 May 1960

A NATIONAL SAFETY COUNCIL PUBLICATION

TRAFFIC SAFETY is dedicated to the prevention of traffic accidents through the presentation of objective information and responsible opinion to official agencies, public support groups and the motor transportation industry. The views expressed do not necessarily reflect the beliefs or policies of the National Safety Council, but they are presented in the conviction that the pressing social problem of traffic accidents can best be resolved through freedom of expression and open debate.

EDITORIAL

Editor: Angela Maher

Associate Editors: Gerald Kaminski
Richard Williford

Contributing Editor: Jack Trimble

Editorial Director: Robert Meyer

Manager, Publications Dept.: Jack Horner

ART

Art Director: Ralph Moses

Cover Design: William Wendland

ADVISORY

Bertram D. Tallamy, Bureau of Public Roads, *vice president for Traffic*, E. J. Buhner, The Silver Fleet Motor Express, Inc., *vice president for Motor Transport, National Safety Council;* Harry Porter, Jr., *director, Traffic;* Alfred C. Finch, *director, Motor Transport;* Paul Jones, *director, Public Information.*

ADVERTISING

Advertising Director: Robert O. Jones

Production Manager: Oliver Mickila

TRAFFIC SAFETY is published monthly by the NATIONAL SAFETY COUNCIL, 425 N. Michigan Ave., Chicago 11, Illinois. Copyright 1960 by National Safety Council. Printed in U.S.A. Entered as second class matter at the Post Office in Chicago, Illinois, under the Act of March 3, 1879.

The subscription price to TRAFFIC SAFETY is $4.50 per year (add 70 cents for foreign charges except to Canada and Pan-American Union). Prices on quantity lots will be quoted on request. All prices subject to a 10 per cent discount to National Safety Council members.

NATIONAL SAFETY COUNCIL

Chartered by the Congress of the United States
Howard Pyle, President

George C. Stewart, Executive Vice President
R.L. Forney, Secretary and Treasurer

Home Office: 425 N. Michigan Ave., Chicago 11, Ill.

San Francisco Office: 703 Market St., San Francisco 3, Calif.

New York Offices:
Field Service & General Information, 60 E. 42nd St., New York 17, N. Y.

Public Service Fund, 639-40 Chrysler Bldg., New York 17, N. Y.

IN THIS ISSUE:

Traffic Operations:

Deaths Down In February, Still Up For Year . . . . . *by H. Gene Miller* 6
Rolling . . . Or In a Rut? . . . . . *by Amos E. Neyhart* 8
Saturation Patrols Work In Minnesota . . . . . *by Harry A. Sieben* 12
Enough Nonsense About Seat Belt Standards . . . . . *by Murray D. Segal* 14
Good Visibility Is a Must (Fact Sheet) 16
The In-Between People Speak Up . . . . . *by Norman Ledgin* 18
Slow Down and Live Restyled For '60 . . . . . *by James R. Barrett* 19
More Light For Night Driving 20

Public Support:

The Legislative Hopper 24
Head For the Check Lane 25
League of Women Voters Veto Blind Corners 27

Motor Transportation:

Pacific Telephone Calls All Drivers 32
Air Defense Command Takes Positive Approach 35
Tips For Fleet Safety Men . . . . . *by John A. DePew* 36

Departments

Today's Traffic 7
News From Capitol Hill 11
Coming Events 26
Boosters 28
Fleet Posters 30
Traffic Record 37
The Safety Library 42
New Safety Equipment 45
Safety Product Literature 46
Advertiser's Index 50

BETWEEN STOPS

In a recent issue of Traffic Safety, readers learned of the staggering number of accidents on the nation's highways involving deer. Cars kill as many as 80,000 deer annually.

In Australia, motorists have an Australian problem—kangaroos! Millions of 'roos roam the western part of New South Wales, and many a serious accident results when they collide with cars.

For those considering a tour down under, here are some helpful hints on how to handle your car when impact appears inevitable. "Control the impulse to brake hard and swerve (gravel roads, you know) and try to hit the animal only a glancing blow with a mudguard, similar to the action of a footballer brushing off an opponent with his hip."

A further warning—"Kangaroos usually travel in small mobs or pairs, so that if one darts across the road, watch out for its mate."

Which reminds us that school will soon be out and others besides 'roos travel in pairs and mobs and dart across the road!

Deaths Down In February, Still Up For Year

by H. Gene Miller

MOTOR-VEHICLE deaths in February declined 2 per cent from the total for February of the previous year. The February total was 2,370, the lowest since February, 1955, when 2,319 persons died.

For the first two months of 1960, deaths were 1 per cent higher than they were for the same months of 1959, totaling 5,240 compared with 5,180.

Disabling injuries during the first two months of the year are estimated at about 200,000. These are injuries resulting in disability beyond the day of the accident and do not include minor injuries which undoubtedly total hundreds of thousands more.

Mileage data are not yet available for 1960 to permit computing rate information.

Among 50 states reporting February experience, 26 had fewer deaths than last February, four reported no change, and 20 had increases.

For two months, 30 states showed decreases while 20 had increases.

H. Gene Miller is director of the National Safety Council's research and statistics department.

Cities registered a 1 per cent decrease in February, according to reports from 725 cities over 10,000 population. For two months, these cities showed a 1 per cent increase from last year.

Cities with fewer deaths in February totaled 113, compared with 119 having more deaths, 493 showed no change (mostly perfect records).

For two months, 156 had decreases while 170 had increases, with 399 showing no change.

In February, 548 of the 725 cities reporting had perfect records. Of these, the three largest were: Toledo, Ohio (343,700), El Paso, Tex. (250,000) and Providence, R. I. (248,700).

At the end of two months, 458 of the 725 cities still had perfect records and of these the three largest were: Grand Rapids, Mich. (212,300), Hartford, Conn. (187,300) and New Haven, Conn. (166,900).

The three leading cities in each population group at the end of two months, ranked according to the number of deaths per 10,000 registered vehicles were:

	Reg. Rate	Pop. Rate
Group I (Over 1,000,000)		
Chicago, Ill.	1.8	4.8
Philadelphia, Pa.	2.6	6.3
Los Angeles, Calif.	3.5	19.0
Group II (750,000 to 1,000,000)		
St. Louis, Mo.	2.7	9.8
San Francisco, Calif.	4.5	17.0
Washington, D. C.	4.5	12.1
Group III (500,000 to 750,000)		
Milwaukee, Wis.	1.3	5.9
Seattle, Wash.	2.1	10.4
Buffalo, N. Y.	2.1	8.1
Group IV (350,000 to 500,000)		
Birmingham, Ala.	1.3	5.0
Denver, Colo.	1.5	8.8
Oakland, Calif.	1.6	6.2
Group V (200,000 to 350,000)		
Grand Rapids, Mich.	0.0	0.0
Toledo, Ohio	0.4	1.7
Providence, R. I.	0.5	2.4
Group VI (100,000 to 200,000)		
New Haven, Conn.	0.0	0.0
Trenton, N. J.	0.0	0.0
Rockford, Ill.	0.0	0.0
Group VII (50,000 to 100,000)		
Topeka, Kan.	0.0	0.0
Fort Lauderdale, Fla.	0.0	0.0
Santa Ana, Calif.	0.0	0.0
Group VIII (25,000 to 50,000)		
Eugene, Ore.	0.0	0.0
Tyler, Tex.	0.0	0.0
Odessa, Tex.	0.0	0.0
Group IX (10,000 to 25,000)		
Boulder, Colo.	0.0	0.0
Englewood, Colo.	0.0	0.0
Mesa, Ariz.	0.0	0.0

Leading at the End of February

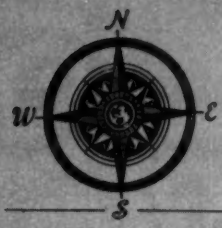
States

Alaska	— 67%	Arizona	— 15%		
Idaho	— 47%	North Carolina	— 14%		
New Hampshire	— 38%	Oregon	— 13%		
North Dakota	— 37%	New Mexico	— 13%		
Wyoming	— 35%	Rhode Island	— 13%		
Iowa	— 29%	South Dakota	— 12%		
Texas	— 25%	New York	— 10%		
West Virginia	— 25%	Virginia	— 10%		
Kansas	— 23%	Massachusetts	— 8%		
Alabama	— 22%	Minnesota	— 5%		
Connecticut	— 22%	California	— 3%		
Vermont	— 21%	Pennsylvania	— 3%		
Nebraska	— 20%	Florida	— 1%		
Maine	— 20%	Oklahoma	— 1%		
Hawaii	— 18%	Illinois	— * %		

*Less than .5%.

Cities

Grand Rapids, Mich.	—100%	Buffalo, N. Y.	— 33%
El Paso, Tex.	— 82%	Houston, Tex.	— 27%
Birmingham, Ala.	— 75%	Fort Worth, Tex.	— 22%
Miami, Fla.	— 75%	Honolulu, Hawaii	— 14%
Oakland, Calif.	— 60%	Denver, Colo.	— 13%
Atlanta, Ga.	— 50%	Chicago, Ill.	— 9%
Omaha, Neb.	— 50%	Seattle, Wash.	— 9%
Providence, R. I.	— 50%	Portland, Ore.	— 9%
Worcester, Mass.	— 50%	San Diego, Calif.	— 7%
Milwaukee, Wis.	— 42%	Philadelphia, Pa.	— 4%
New York, N. Y.	— 35%		



Today's Traffic

Small town bike program

The small town of Jerome, Ill., is proving that size is no barrier to traffic safety leadership. A bicycle program tailored to the needs of the small community, developed by the Women's Club of the tiny Springfield suburb, has proved so successful that the Illinois Division of Traffic Safety has selected it as a pilot project for the entire state.

Penny wise, pound foolish

U. S. parents spent $190 million in extra insurance premiums in 1958 because drivers under 26 were operating the family car. This is three times the amount needed to give every U. S. boy and girl driver training in a high school driver-education course.

Automotive galley slaves

The first horseless carriage was driven by "manpower," not horsepower. The strange vehicle, which appeared on the streets of Nuremberg, Germany, in 1649, was propelled by two men concealed in its back section who turned the rear axle with a winch.

They keep getting smaller

Two police officers thought a space ship must have landed when they saw a diminutive motor vehicle, piloted by a pint-sized driver, chugging along a Milwaukee street at dusk one evening. Closer inspection revealed that the driver was a 10 year old boy, accompanied by a passenger of the same age. Their vehicle was a four foot, gasoline-engine powered "kart," illuminated by a lone flashlight.

Traffic warning — Virginia style

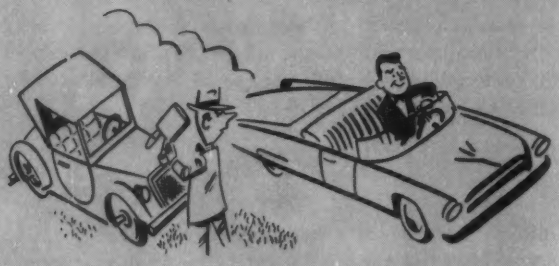
A recent issue of the *Richmond News Leader* featured traffic safety right *in* the masthead. Directly under the newspaper's name a line was inserted giving a dangerous driving warning and a weather report. It was followed by a reference to an inside page where additional information could be found.

Head packaging

"Auto caps" are being tested in Great Britain. The well-padded headgear absorbs much of the impact and helps prevent injuries if the driver is thrown forward against the instrument panel or windshield. The National Safety Council of Western Australia plans to import a few for experimental use.

How are traffic safety programs doing —

ROLLING . . . or in a rut?



by Amos E. Neyhart

PROGRESS means change.

As Charles F. Kettering, the great engineer, inventor and philosopher once said:

"If today you are doing something exactly as you did it 10 years ago, chances are you are doing it wrong."

That's why it is necessary for each of us caught up some way in this complex business of trying to keep ourselves and other people alive in today's traffic to stop and take an honest reading.

The personal philosophy on age once voiced by the great Negro baseball pitcher Satchel Paige—"I don't look over my shoulder, somethin' might be following me"—seems to have been embraced by some of our traffic leadership. They know way down deep where the truth boils and bubbles that close behind them are lurking the many tentacled problems they began skirting 10 and even 15 years ago. And when I say traffic leadership I mean our business and civic leaders as well as a few of our professional traffic control people.

But before we start casting stones or tossing bouquets for what has or has not been done, let's see what we are fighting.

Let's examine the impact of the automotive and motor transportation industries on our U. S. economy, factors with which every businessman must deal.

One pay check out of every 10 in the United States goes to a commercial vehicle driver.

One pay check out of every seven goes to someone employed in the automotive industry.

One business out of every eight is automotive.

Truck registrations and total ton-miles of cargo hauled reached new highs last year.

Throughout the U. S., there are 59,000 truck fleets of 10 or more vehicles.

The number of farm trucks in the U. S. has risen from 2,200,000 to 3 million in the past eight years.

One-third of the nation's school children are transported to school by bus.

In 1958, manufacturers produced 5.1 million motor vehicles; in 1959, 6.7 million; in 1960, estimates range as high as 7 million.

The registered vehicles in 1958 burned up enough gasoline to fill a ditch 18 feet wide and 20 feet deep, extending from Portland, Ore. to Portland, Maine.

There are now more than 68 million registered motor vehicles of all kinds and about 82 million licensed drivers.

By 1970, there will be 99 million vehicles and 110 million drivers, traveling over a trillion vehicle miles a year.

Fallacies About Problems

There are many fallacies about our traffic problems. Information contained in a recent report, *The Federal Role in Highway Safety,* published by the U. S. Bureau of Public Roads, disproves some widely held beliefs about traffic safety. Here are some of the theories which have been disproved by the Bureau's findings:

Theory: Traffic fatalities in the U. S. have been increasing since prewar days.

Fact: The all-time high of 39,969 traffic fatalities in 1941 has not been reached since that time and the *fatality rate* has been declining steadily for almost 20 years—from a rate of 12.0 in 1941 to an all-time low of 5.6 in 1958.

Amos E. Neyhart is administrative head, Institute of Public Safety, The Pennsylvania State University, and consultant on driver education for the American Automobile Association.

Theory: High horsepower cars have higher accident rates.

Fact: High-powered cars are not, in themselves, inherently hazardous. The findings show that lower horsepower vehicles are the ones associated with higher accident rates.

Theory: Women are safer drivers than men.

Fact: We doubt if it will settle this long-standing argument, but BPR says that the rate of involvement in accidents is 18 per cent higher for women in the daytime and 38 per cent higher at night. Let it be known, though, that the safety record of professional drivers helped the men on this one. BPR says that if you discount the records of the professional drivers, the men don't have much of an edge.

Theory: The accident rate is lowest at slow speeds.

Fact: While warning of the very real dangers of extreme speeds and of speeds too fast for conditions, the report says that a detailed study of traffic on major highways in rural areas revealed that the accident rate at speeds under 40 m.p.h. was several times greater than the rate at higher speeds. Consideration was given to the amount of traffic moving at different speeds.

Theory: Cars of the past were sturdier and safer than the cars of today.

Fact: Structural advancements have made today's cars inherently safer, according to the report. These advancements are not limited to the sturdiness of frame and body construction, but also include improvements in steering geometry and suspension.

Theory: Fatality rates are higher at night chiefly because of darkness.

Fact: While recognizing darkness as a contributing factor, the report labels this statement as a "misleading oversimplification." According to the study, night accident rates are pulled up by the disproportionately high number of fatal accidents after midnight. The rate between 2 and 4 a.m. is more than double the rate between 9 and 11 p.m. Since it is equally dark during both periods, other factors such as intoxication and driver fatigue must be responsible for the increase after midnight.

A Few Comparisons

Have we, in spite of these problems and fallacies, made any real progress through our traffic safety programs?

I would like to go on record as one who sincerely believes that we, in the United States, have made encouraging progress in traffic safety, in spite of our inadequate safety program.

A study of the traffic fatality rate in London, England, for example, will show that Londoners have compiled a record which is approximately two times as bad as any major city in the United States. We always look upon the English people as being law-abiding and not given to careless and irresponsible conduct. And yet, we find that their traffic fatality rate is at least twice as bad as ours, on the basis of total miles traveled, as well as upon the basis of the relative proportion of registered motor vehicles.

England, however, is in turn considerably ahead of the other nations in Europe in the matter of traffic safety. Some of the great cities of Europe, like Vienna and Rome, have traffic fatality rates 10 and 15 times worse than our major cities, and Cairo, Egypt, has a record 30 times as bad as our major cities. These comparisons, of course, are all based on the miles of vehicular travel in each of the areas named, or upon the total number of vehicles registered in each such locality.

These things I mention only to lay a foundation to emphasize the fact that we are making real progress in the United States in the field of traffic safety. I quite agree that we have not achieved our goal, that there are many unsolved problems, and further that we need to increase the effectiveness of our activities in this field.

Specifically, then, just what progress has been made through our traffic safety programs?

From a death rate of 15.9 per 100,000,000 miles of travel in 1935 to 5.4 in 1959 is indeed splendid improvement. Had we continued at the 15.9 death rate in 1959, we would have killed more than 100,000 instead of 37,000.

In 1932, not a single high school offered a driver education course. In 1959, over half of our public high schools offered a driver education program, and one-third had programs including practice driving as well as classroom activities. More than one and a quarter million boys and girls are trained annually.

In 1935, there were no teachers specifically prepared to give such courses. By 1959, there were over 18,000 teachers so prepared.

In 1936, there were no college professors specifically prepared to train high school teachers for traffic safety work. Now, we have over 800 professors so prepared.

Turn Page

In 1932 not a single high school offered a driver education course. In 1959, half had such training.

By 1970 there will be 99 million vehicles and 110 million drivers traveling a trillion miles yearly.

High powered cars do not necessarily have high accident rates — actually score better than lower rated cousins.

Dan Dugan Transport saved 434,000 gallons of gasoline in one year by a sound training program for drivers.

"We must make greater use of chemical tests for intoxication — back judges and police in use of this equipment."

"Every community should have a traffic school so everyone will have a chance to learn about traffic and driving."

In 1938, there were no colleges or universities offering Motor Vehicle Fleet Supervisor Training Courses. Now we have over 50 colleges and universities offering such courses. To date, they have trained over 18,000 supervisors who have under their supervision more than 2.5 million drivers.

In 1937, 15,500 pedestrians were killed in traffic accidents. In 1959, the number was reduced to 7,700, or approximately a 50 per cent reduction.

The death rate for children aged 5 to 14 years was 15.8 for the 1923-1927 period. This was brought down to 8.0 in 1959.

Studies reveal that boys and girls trained in high-grade driver education courses in high schools have from 40 to 66 per cent fewer violations and accidents than similar groups not so trained.

These facts and figures show beyond question that we have made real progress in traffic safety.

However, I would not be true to my profession if I said, "The future holds no traffic problems." We expect 99 million vehicles and over 110 million drivers in 1970. Believe it or not, motor vehicles are here to stay. But, are we here to stay, even for a reasonable period?

Here is the seriousness of today's traffic problem. Statistically speaking, if there are two children in your family, one will be killed or injured in traffic.

Here Are Some Answers

Why haven't we made more progress in traffic accident prevention? Here are my ideas:

Not enough of our people recognize the seriousness of the problem.

Too few of us realize the terrific cost in dollars and cents of traffic accidents—$5,900,000,000 in 1959.

Not enough people have sensed the need for "professionalism" in our work. Therefore, not enough stress is put on proper training of personnel.

We, as people, have failed to accept our responsibilities as drivers, pedestrians, citizens, and voters.

We, in the safety field, have failed to stress sufficiently the need for better driver licensing and periodic checks of all drivers.

We have done a very poor job of informing the adult public on these traffic matters.

Too little attention has been given to proper priorities among programs affecting traffic safety.

Top brass has not, in all cases, insisted on further improvement in the traffic accident record.

Basic research has lagged seriously on fundamental causative factors in traffic accidents.

There has not been enough dynamic leadership. Where there are real leaders, there are good programs.

Training Pays Off

Here's how traffic safety programs and proper driver selection and/or training pay off:

- Chicago began an intensive traffic safety program in 1952. This year, for the seventh consecutive year, deaths have been reduced. The city now has won an international reputation for outstanding accomplishment in traffic safety that is in direct contrast with its lowest rating among big cities in the United States five years ago.
- According to Earl Allgaier, research specialist for the American Automobile Association, 2,814 lives have been saved, 98,490 injuries prevented, and $298,810,000 economic loss prevented from 1936 through 1956 because of the high school student driver education program.
- Dan Dugan, of Dan Dugan Oil Transport Co., Sioux Falls, S. D., saved 434,000 gallons of gasoline in one year through his driver training program for his tank truck drivers.
- M & G Convoy, Buffalo, N. Y., received a check for $160,000 from their insurance carrier for accidents they didn't have during one year of operation. This isn't bad to add to profits in one year! This company received three national awards in one year.
- Hall's Motor Transit, Sunbury, Pa., is making an effort right now to reduce the cost per mile of operation by working with the drivers that have a $0.02 per mile cost over the lowest cost driver. This will mean a saving of $20,000 each year on one million miles of travel. Such a program is certainly a good investment.

These facts and figures, and many, many more I could cite, show beyond

To Page 48

NEWS FROM CAPITOL HILL

CONGRESSMAN Roberts' House Subcommittee on Health and Safety held hearings on progress made by the Public Health Service and the automobile industry in eliminating noxious unburned hydrocarbons from motor vehicle exhausts. He asked why the automobile industry was limiting to autos sold in California the installation of devices designed to control crankcase blowby fumes. "Air pollution does not stop at state boundaries," he said; it "is a serious public health problem" and costs the country "as much as $5 billion a year." Roberts said: "The question is now that we have identified automobile exhaust gases as one of the chief culprits (of air pollution), what are we going to do about it?"

The hearings revealed a sharp disagreement between the automobile industry and the Federal Government. The Automobile Manufacturers Association and the Secretary of Health, Education and Welfare agreed that crankcase blowby is a major source of unburned hydrocarbons in auto emissions, but differed as to the proper remedies. The AMA said that crankcase and exhaust hydrocarbons are of the same order of magnitude, and that a device to control blowby gases could halt from 20 to 70 per cent of the total unburned hydrocarbon emissions, including both exhaust and crankcase.

How About Rest of U.S.?

Such a device would be installed as standard equipment on all 1961 models sold in California. Elsewhere "the devices can be made available for any other area where it might be determined that they are needed or wanted." The AMA stated more research was required before emission control devices could be nationally standard equipment; "each community should be studied carefully to establish its specific requirements." It said that "Los Angeles smog" was unique and "not likely to occur anywhere else on earth with the frequency and intensity found in this area. . . . Attempts to apply sweeping remedies across the nation would be unfair to the public."

HEW Secretary Flemming said he could not understand the limitation of the blowby control device to one state. He urged the industry to adopt it as universal standard equipment without mandatory federal legislation, although he disagreed with AMA's estimate of its effectiveness and with its statement as to the uniqueness of Los Angeles smog. He said that "air pollution is going to be a continuing problem," and that auto exhausts "are of concern in various areas. . . It does not appear feasible that this type of problem be approached on an individual community basis. The national character of automobile manufacture and distribution is such that consensus as to desirable actions should be obtained on a broader geographic basis."

Ask Legislation

HEW urged legislation to place the federal air pollution control program on a permanent basis, to provide authority for public hearings held by the Public Health Service on air pollution problems of more than local significance, and to remove the existing $5 million annual appropriation limit. Such a bill, said the Cabinet officer, would provide a mechanism "for exercising federal leadership in this field." H.R. 10696 (Roberts) and S. 3108 (Kuchel) are the Administration proposals to achieve this proposal.

The late Senator Neuberger called for enactment of S. 2556, directing the Public Health Service to assist in the development of a device to control auto exhausts, and requiring industry to install such a device.

In the midst of all this discussion, the Air Force announced approval of a device for installation on its ground vehicles to remove crankcase blowby fumes; it expects the device to be standard on most of its ground vehicles within three years.

The Public Health Service and the State of Connecticut announced a study to determine whether there is a relationship between the health of motorists and traffic accidents. The inquiry will cover hearing, vision, diabetes, anemia, heart and lung disorders and driving attitudes. The Public Health Service sees the study as an effort by "health authorities to turn their attention seriously to the great social problems of traffic accidents."

The U. S. Bureau of Public Roads compiled forecasts made by state highway departments which show an expectation of 114 million registered motor vehicles by 1976, with a driving mileage of 1.2 trillion miles that year. This is an increase of 75 per cent in motor vehicle registration and 93 per cent in travel over 1956.

Commercial Transportation

The Supreme Court of the United States refused to reverse a holding by a federal court that a motor carrier was liable to a shipper, where the carrier —in violation of ICC safety regulations — had transported the shipment with knowledge that it was improperly loaded. The court so ruled despite the fact that the shipper had breached its contract obligation to load the shipment properly on the carrier truck.

In connection with a study of the safety of bus passengers, made as part of a report on the recent accident in New Jersey involving a truck and a school bus, the ICC announced it would analyze the need for re-examination of its rules relating to escape provisions and the safeguarding of fuel supplies.

ICC Bans Windshield Stickers On Trucks

The ICC has ordered that on and after July 1, 1961, there may be only one vehicle inspection sticker, prescribed by the state of ownership on the windshields of truck cabs. This one sticker is to be applied only to a low corner of the windshield. There may be no other sticker on the windshield. The new rule prohibits use of any sticker or other vision-reducing matter on windows on either side of the driver's cab.

SATURATION PATROLS WORK IN MINNESOTA

by Harry A. Sieben

TOO often strict enforcement programs are dealt a crushing blow by public criticism. On the other hand, the public expects law enforcement agencies to handle the traffic problem effectively.

Faced with this situation the realistic enforcement agency must constantly keep a finger on the public pulse to determine how much pressure can be exerted without alienating the citizens —for law enforcement is only as effective as the public acceptance it receives.

Does this rule out a strong enforcement policy? Not if the enforcement agency takes its pulse readings carefully, does not underestimate the public's willingness to cooperate, and administers its program impartially.

Minnesota's "saturation patrols" are an example of a firm enforcement technique that has been made palatable to drivers.

Gov. Orville L. Freeman initiated the program early last year. He requested the safety division to determine the trouble spots on the state's trunk highways, where studies indicated there were high accident frequency roads. Generally this included between 50 and 100 miles of both state trunk and county or township highway. He then proposed the saturation patrols—joint operations based on intense patrolling of these selected areas. The mass operation would include state highway patrol officers, the state liquor control agents, sheriffs and local law enforcement agencies.

"I believe our citizens want strict enforcement of traffic laws," Governor Freeman said in announcing the program. "They want to cut down the slaughter on highways just as much as safety experts. We will be strict and fair, and we will ask the citizens to help us decide if our program is effective."

He said that each program would be given advance newspaper, TV and radio publicity, and that media representatives would be invited to attend briefing sessions and to ride in units during the operation to observe the methods used.

The program involved a combination of selective enforcement and the area assignment of highway patrol officers. This has proved to be sound and practicable in its approach to the accident prevention program during peak traffic hours. This procedure serves well in Minnesota's situation where all enforcement agencies are too understaffed to maintain adequate coverage at all times.

For example, the Minnesota Highway Patrol has but 330 men in a state that licenses 1,750,000 drivers. It has authority in traffic only on the 12,000 miles of the state trunk highway portion of the 100,000 mile highway system of the North Star state. The remainder is the responsibility of other enforcement agencies.

The first "dry run" was made early in the summer in a principal resort area in northern Minnesota. The response was so gratifying, the action so effective and well received by both the participating agencies and the public, that plans were forwarded immediately for saturation of critical points in other areas of the state including the heavily traveled roads of the metropolitan areas. During the summer eight area operations were conducted.

The purpose of the campaign was to reduce traffic accidents. In this the operations were successful.

A typical example was the operation in rural Hennepin county—the area that had the state's heaviest population and heaviest traveled roads. An average of 40 accidents are reported for any Friday-Saturday night period on the 20 mile stretch selected. During this operation only one "fender-bender" was reported. On another comparable road section, one 10 hour operation reduced the tally to zero.

Harry A. Sieben is safety director of the Minnesota Highway Department.

Sheriff John Cahill of Beltrami county, in resort country, expressed the appreciation of county officers when he commented, "I would like to thank the many motorists whose cooperation made it a pleasure to conduct our safety check. I think the whole community owes a vote of thanks to the men and officers of the highway patrol who came here to help us make this accident prevention program possible."

The press was also friendly. The *Farmers Independent* at Bagley, carried this review: "This was one of the most worthwhile trips we ever had the opportunity to make. It was a pleasure to have the gentleman in the maroon uniforms (highway patrol) here. They are welcome back any time." The newsmen had been invited and had accepted the invitation to accompany officers during the operation.

Follow Definite Plan

Now, how did these law enforcement agencies conduct mass traffic safety checks affecting thousands of drivers and still come out "smelling like a rose"?

Following a request for aid from the county sheriff, Minnesota Highway Patrol officers met with county as well as city, town and village enforcement officers to outline a plan acceptable to all as it would be used in the particular critical area.

After the agencies were in agreement and a date had been set—a Friday and Saturday night—the public was immediately informed of the coming operation by a heavy publicity campaign utilizing all available news media. At least two days' notice was given, outlining the coming concentration of law officers. Local newsmen were invited to take part in the briefing and the operation so that no one could claim that the saturation patrols were "sneak attacks."

An editorial in the *Austin Daily Herald* said:

"If you are tagged tonight, please do not come to the *Herald* office and shed tears on our shoulders. Those tagged will be foolish. Your newspaper and other news media have told you there'll be a crew of 50 officers working in a 10 hour intensive traffic safety drive. If you're driving, the chances you'll be picked up are excellent."

On the day of the operation, highway patrol cars and other police vehicles converged on the operations headquarters. In many of the smaller communities, the appearance of 30 to 60 marked vehicles and their uniformed drivers gave a spectacular show of strength.

Briefing sessions preceded "H-hour," supervised by an inspector of the Minnesota Highway Patrol who coordinated the activities of the many areas.

Special emphasis was given to the new "open bottle" law which makes it illegal in Minnesota to drink liquor or possess an open bottle of liquor or beer in any vehicle on public highways.

Also at the briefing sessions were the state liquor control commissioner, the heads of various local agencies and myself.

All were cautioned to, "Above all, be courteous. Do not inconvenience motorists without reason."

The selected area was divided into districts, interconnected by patrol and sheriff radio networks, and given identifying call letters. To each district were assigned five to 12 highway patrol officers who worked with the officers of the communities involved.

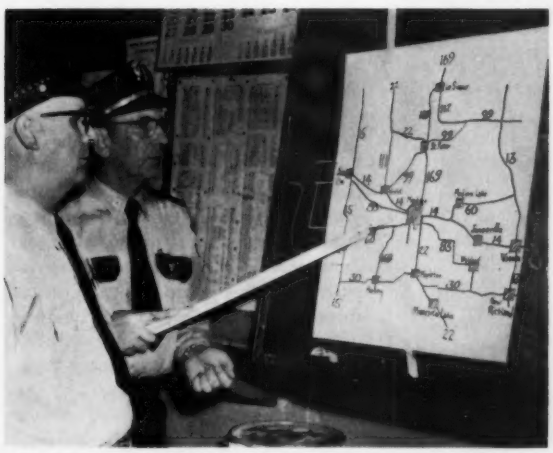
Smooth Operation

Driver license checks were held during the early hours of the evening, while there was adequate visibility. So smoothly were vehicles and drivers checked that delays were only momentary—no long waiting periods at road blocks, no strained patience of the law-abiding driver—for instructions had been given to avoid long delays of motor traffic during road checks.

An elderly couple appeared actually pleased when stopped. The inconvenience was so minor for them that they laughed and joked with officers. Even violators appeared more embarrassed than angry; there were no charges of gestapo squads.

But in spite of the advance publicity

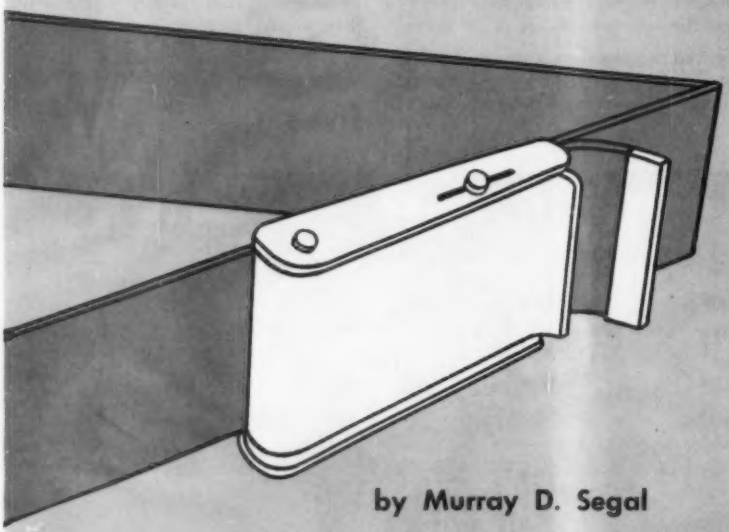
To Page 44



Chief Harold S. More, Mapleton (L), and Asst. Chief Garnet E. Hall, Minnesota Highway Patrol, lay plans.

Coordinated action is outlined at briefing session which is attended by police from all areas involved.

ENOUGH NONSENSE ABOUT SEAT BELT STANDARDS



by Murray D. Segal

FROM the very start of the safety belt program, virtually everyone, user and non-user, has been willing to talk about standards for safety belt design. Almost without fail the first question asked when the subject of belts is broached is—well, how do I know a good belt from an inferior one? In recent weeks an article in a widely read consumer's publication has added to the confusion.

The purpose of this article is to present the facts concerning standards for motor vehicle safety belts in order to clear up the many misconceptions which exist, and to aid the layman in the purchase of reliable belts.

There are two widely used specifications for seat belt design. The Society of Automotive Engineers has prepared a Recommended Practice for Motor Vehicle Seat Belt Assemblies (current designation-SBA-4). In the usual sense of the word this is not a standard since SAE cannot enforce its use nor can it test belts to see if they comply with the minimum requirements. In fact, however, it is most widely used by seat belt manufacturers as their design criteria. The General Services Administration has also published a standard for use by all government agencies in purchasing belts for federally owned vehicles (present designation JJ-B-18 5a).

SAE Recommended Practice

The first edition of the SAE practice appeared in November of 1955 and was prepared by the members of a SAE committee organized to do the job. Members of the committee came from the automobile manufacturers, American Association of Motor Vehicle Administrators, the National Safety Council, the insurance industry, seat belt and seat belt webbing manufacturers and several researchers active in the field. The initial recommended practice of this group has been revised three times in order to keep pace with technical advances.

This document recommends performance abilities for belts and also laboratory test procedures.

Murray Segal is traffic engineer for the National Safety Council's traffic operations division.

Items covered in the SAE practice include: webbing width, strength and elongation; buckle release force, slippage, corrosion and minimum strength of the entire assembly. At present the committee is developing an appropriate abrasion test.

Considerable research was necessary to develop the various elements of the SAE recommended practice since this was a pioneering effort. There was no past experience to draw upon with the exception of the CAA specifications for aircraft belts. These proved to be inadequate for direct application to automotive belts. The SAE practice provides for approximately twice the design load of our standard commercial aircraft belt.

Meet Different Needs

There are significant differences in the SAE and GSA standards and they are discussed in the following paragraphs. First, however, what is the reason for these differences? It's a simple case of two different situations requiring different solutions. The federal government in preparing a specification for the purchase of belts in government vehicles was specifically concerned with one segment of the population—the adult male. In contrast, the SAE committee was confronted with the problem of designing a recommended practice which would cover belts suitable for use by the entire population.

Essentially the variations between the two, while significant, prove small in actual practice. The primary variation is in the strength provisions of the two standards.

In both cases, two separate tests are used to evaluate the structural characteristics of the belts. First, the entire seat belt assembly (webbing, buckle and floor hardware) is subjected to a force similar to that which could be expected in actual use. This is known as a "loop load" and is 4,000 pounds in the SAE recommended practice and 5,000 pounds under the GSA specification. Second, the webbing alone is required to pass a tensile strength test of 3,000 pounds under the SAE and 4,000 pounds for GSA.

In the loop test, if the entire force is 4,000 pounds, the tensile stress in the webbing would amount to 4,000 divided by two—or 2,000 pounds—since each half of the belt takes half of the entire force. It is obvious that both specifications allow a safety factor of 1.5 for the webbing in anticipation of deterioration over a long period of time.

To put these figures in perspective, a car stopping in a distance of three feet from 30 m.p.h. would cause a 200 pound man to exert a total force (i.e. loop load) of 2,000 pounds on his safety belt.

There are two widely used types of automotive belts — the aircraft type utilizing a cam buckle and the metal to metal buckle type. The cam buckle is secured by the action of the cam on

To Page 47

THE GIFT THAT SAVED A LIFE

SOME time ago, author Murray Segal gave a set of seat belts to his brother-in-law, Michael Bolotin of East Hampton, Conn.

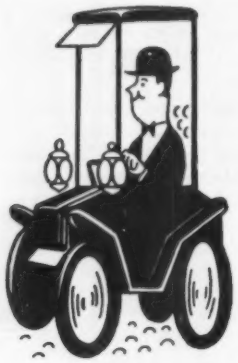
As Segal sat at his typewriter recently, pounding out his article, "Enough Nonsense About Seat Belt Standards," he received word that Bolotin had been involved in a serious auto accident—while wearing his seat belt.

Here's how the accident occurred.

Bolotin was approaching the crest of a hill on Route 6A, Connecticut. His car hit a patch of glare ice and started to skid into the opposing lane. Two cars were in the opposing lane, so Bolotin attempted to right the vehicle and keep in his own lane. In doing so he aggravated the skid and slid broadside into a snow bank on the right hand edge of the highway. The vehicle flipped into the air and landed on its roof on a stone wall. The driver's door opened on impact, but he was held in the vehicle by his seat belt.

The vehicle was a total loss. Injuries to Bolotin—minor cuts and bruises. He credits the belt with saving him from serious or fatal injuries.

In the picture below Segal shows Daniel G. Reynolds, director of NSC traffic operations, a picture of the wrecked car.



GOOD VISIBILITY IS A MUST

Vision Begins With You

Vision is the most important sensory function in driving. Whether you have good visual acuity, depth perception, peripheral vision, color perception, adaptibility to darkness, and the other things that make for good vision, only your oculist can judge. Most states require an eye examination for issuance of a new driver's license; many require such examinations for renewal. Every driver should have periodic eye examinations, whether required by his state or not. Vision trouble can often creep up on you without your being aware of it. Most deficiencies can be corrected or compensated for.

But let's assume you have the eyes of a hawk. This won't make you a safe driver unless you also have good seeing habits. These include seeing those things having to do with safe driving and ignoring the rest; looking well ahead of you; constantly scanning the foreground, background, and sideground; and keeping your eyes moving.

Let's say you are O.K. on this score, too. You still have to create conditions for making the best use of your ability to see. This begins with your car, and the responsibility is yours.

Windshield and Windows

Distortion—For the windshields of some recent automobiles, good visibility has been sacrificed for style. If you are in the market for an automobile, look carefully through all parts of the windshield. If distortion at any point is bothersome or makes you unsure where objects really are, look for another model car.

Tinted Glass—Slightly tinted glass for windshield and windows is almost a necessity for air conditioned cars. Its main function is to cut the amount of heat radiated into the car, but it also reduces daytime glare. But keep in mind that tinted glass cuts the distance at which you perceive objects ahead of you at night.

Cleanliness—All of your precautions will do little good if you don't keep your windshield and windows clean of dirt and film. Film may also tend to accumulate inside the windows. A moderately dirty windshield may not bother you much in the daytime, but at night the glare of oncoming headlights diffused against the film may blind you or make you fail to see unlighted objects in your path—pedestrians, for example.

Stickers and Objects—People who plaster their car windows with stickers showing where they have been impress nobody but themselves. Furthermore, such stickers seriously restrict visibility. Some states have laws forbidding placing of any stickers, except those required by local law, on windshields or windows. Some laws also forbid putting objects, dangling or otherwise, in any position in your car so as to obstruct vision.

Another common practice is the piling of objects on the shelf above the back seat. Not only does this interfere with vision to the rear, but if any of the objects are heavy, they can become missiles aimed at the back of your head in case of collision or sudden stop.

Also, remember that if the hats of your rear seat passengers interfere with your seeing, it is perfectly proper to request them to remove them. Your first concern is for their safety.

Wipers

The windshield wiper is not an entirely satisfactory solution to keeping your windshield clear, but nobody has yet come up with anything better. Whether your wipers are electric or vacuum-operated is of little importance so long as they run at an adequate and constant speed.

Arms—Age and exposure weaken windshield wiper arms to a point where they do not hold the wiper tight enough against the windshield. The result is poor wiping, streaking, wind lift, and riding over ice and sleet. Current standards are that the arm should exert a minimum of one ounce of pressure for every inch of blade. In other words, if your wiper blades are 12 inches long, the arm should exert 12 ounces of downward pressure at the end where it connects on to the blade. Some garages have gauges to test this. In some states having vehicle inspection programs, this is an item now tested.

Blades — Sun and exposure cause wiper blades to deteriorate, even though they may not be particularly worn. Old blades cannot give a clean, dry wipe. They should be checked frequently, depending upon how much they are exposed, and should be replaced as needed.

Washers—If you have good wiper blades and arms you may not need windshield washers, but they do come in handy and add an extra margin of safety and convenience. They are particularly useful when traffic throws up film during a light rain or mist. Don't use them in freezing temperatures, or you will have a windshield suddenly covered with a blinding coat of ice. It's a good idea to add a small amount of solvent, especially developed for the purpose, when you fill the reservoir. This helps cut film from the windshield when you first turn the washers on.

Heater and Defrosters

The best way to keep your windshield and windows from frosting up or steaming on the inside during cold weather or rain is to have a good heater and good, powerful defrosters. A heater that brings fresh air in from the outside is by far the best. Recirculating heaters allow too much moisture from the breath of occupants to accumulate. This deposits on the inside of windows and windshields as steam or frost. If your heater does not provide enough fresh air, keep a window or ventilator partly open.

Mirrors

A good rearview mirror is essential to safe driving, particularly on multiple-lane streets and highways, where switching lanes is often necessary in preparation for turning. A left-mounted outside rearview mirror is very helpful in switching lanes and making left turns. Furthermore, it may provide the only means of your seeing to the rear in case weather conditions obscure vision through your rear window. A rectangular outside mirror gives a greater range of vision where it counts than does a round one.

Some people also use a right-mounted outside mirror. Properly mounted and adjusted, such a mirror helps eliminate the blind spot to the right and rear of your car.

Lights

The biggest obstacle to good vision is darkness, and good, properly-adjusted lights are your most important aid in reducing this obstacle.

Headlights—The first thing is to keep them burning. Never drive at night with one headlight out. Not only is your own forward vision reduced, but other drivers cannot determine your position. Equally dangerous is use of parking lights instead of headlights for city driving. Turn on your headlights at dusk.

Dirty lenses can reduce light output by 25 per cent. Keep them clean. When driving on wet roads, it may be necessary to stop occasionally and wipe road film from the lenses.

Proper aiming of headlights is vital. Improperly aimed lamps not only reduce your visibility but may blind drivers meeting you. Your lights should illuminate the road directly ahead of you and an additional area to the right. Only a competent mechanic with proper equipment can adjust your lights. They should be checked frequently, since bumps and road shocks can knock them out of alignment.

Lights should always be dimmed when you are meeting another car or when following another car closely.

Backup Lights—Although usually an optional accessory on automobiles, backup lights are a good investment. They light automatically when your car is put in reverse with the ignition on and not only illuminate the area behind you but serve as a signal to other drivers that you are going to back up.

Bugs

Insects hitting the windshield are a plague of summer driving. Various shields mounted on the hood are of help. When bugs accumulate to the extent that they reduce vision and cause glare, they must be cleaned off. A dry rag is usually ineffective, and an ordinary wet rag is little better. Special abrasive bug rags work well, and a mildly abrasive glass cleaner (available in pressure "push button" cans) is an excellent item to carry in your car during summer.

Some Other Things

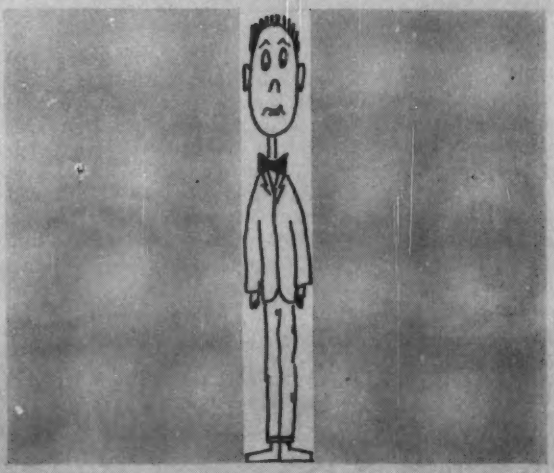
1. Avoid looking at bright or glaring objects while driving.
2. Turn your dashlights down at night enough so that you can read your instruments but still not get glare.
3. Sunglasses of good quality help reduce daytime glare. On long trips, wearing them during the day will help your eyes adjust to reduced light as night approaches. Always remove them at sundown and before entering tunnels.
4. Lower your sunvisors when driving into the sun.

To *be* seen . . .

1. Turn on headlights, not parking lights, at dusk.
2. Check your taillights frequently to make sure they are in working order and the lenses are intact.
3. Use your turn signals at least 100 feet before making a turn or changing lanes.
4. Using reflectorized tape on bumpers will make your car more easily seen.
5. If you have to stop along the road at night, make sure your car is well lighted and use a flashing red lantern or flares. Dim your headlights.

It's a good idea to carry with you . . .

1. A cloth to wipe dirt and road film from the windshield and headlamps.
2. A snow brush and window scraper in winter.
3. A bug rag or mildly abrasive window cleaner in summer.
4. Extra fuses for your electrical system.



The 'In-Between People' Speak Up

by Norman Ledgin

WHAT makes the teen-age driver tick?

The teen-ager's symbol of success is the ignition key jingling in his pocket. To win his right to this, he uses on parents a variety of disarming approaches, ranging from baby-faced innocence to blackmail. But as he heads for the garage, exactly what goes through his mind? What lies beneath the confident smile of the 15- or 16-year-old as he backs, with surprising skill, out of the driveway?

Judge Murray Anderson of Lake Charles, La., whose traffic court received a first place American Bar Association award in 1958 for cities of 50,000-100,000 population, is now busy picking the brains of this middle-teen group. He requires young violators in the juvenile traffic court to write 250-word essays telling their views on traffic safety.

Protected by the promise of anonymity, the teen-age writers give free rein to their thoughts. They write with frankness about parents, officials, police, and themselves.

But they write as they feel deep down—there is no coaching by the court, and this depth-probing by Anderson will at least provide new approaches for the traffic safety education program of the Calcasieu Safety Council, which serves the Lake Charles area.

The monthly juvenile traffic court is a major educational facility in itself for drivers 16 and under (those 17 and up go to the adult court). They and their parents hear Anderson explain the prevailing teen-age accident problem, and a film illustrating this problem is shown before cases are heard.

The court meets unofficially (the legal alternative is to file petitions of delinquency to bring the youngsters to the adult court), and "convicted" violators are asked to surrender their licenses voluntarily for varying periods according to the nature of the offense and their prior records. None has ever refused.

What Did They Think?

Generally, teen-agers have been favorably impressed with their treatment in the juvenile traffic court. Several wrote in their essays that the court has meant a good safety lesson for them, and some were openly thankful. A few confessed they didn't like it at all.

Perhaps the most significant attitudes revealed in the themes were those toward adult drivers. Twenty-seven per cent of the writers felt their parents or other adults were bad examples.

"My father and mother are always telling me not to drive fast or recklessly," wrote one boy, "but they are always driving too fast and recklessly, especially my father. He is always cutting in and out of traffic, passing around curves, following too closely. My mother sometimes drives too slowly where she should drive fast, almost causing a couple of wrecks."

Some youngsters struck at parental leniency as well as strictness. Others decried their folks' lack of interest. A few teen-agers indicated they'd made a thoughtful analysis of the parent-child relationship.

Possibly the most mature indictment of adults was this:

"The average teen-agers of today, whether their actions show it or not, have the full ability to think for themselves, and with a little patience and guidance from their elders, have the ability to see right in contrast to wrong and to understand that the only way to drive is carefully and safely. . . . Because parents do not develop high enough standards for themselves, (they are) not qualified to discipline anyone else."

There was a substantial feeling (25 per cent) that drivers generally are ignoring traffic laws, that they misjudge driving ability, or they don't appreciate the dangers of the automobile. One girl commented:

"Once a person starts passing red lights and stop signs or speeding, he automatically is lying and cheating."

Wrote one boy, "People like to show what good drivers they are, so they do things that would be considered pretty good driving in a stock car race but reckless driving on the highway."

Norman Ledgin is manager of the Calcasieu Safety Council, Lake Charles, La.

And a repentant youth counted his blessings by writing, "It took a pretty bad accident to make me start worrying about traffic safety, and I'm glad that was all it took."

Eighteen per cent of the teen-agers blamed themselves for their predicament, and some related their attitudes to environmental inadequacies. A 14-year-old motor scooter operator attributed his general unhappiness to (1) rock and roll and the lack of wholesome recreational facilities, (2) inability to find decent after school and summer work, and (3) the trend towards going steady.

All in this group admitted showing off behind the wheel, and one writer dug to the bottom of the problem and came up with this rationalization of whatever teen-age rebellion does exist:

"Sometimes we are pushed into a certain class and considered as one mass of in-between people, neither young enough to be children nor old enough to be grown up. We are thought bad drivers, so we don't have a chance. Either a smart cop will stop us, or Mom will read another one of those articles, and we won't be able to drive the car."

Others saw a chip on the teen-age shoulder, but only a minority of young people, they felt, carried it into the car. "Most of the teen-age drivers I know," was one typical comment, "are careful and safe drivers. They know that speed is no sign of driving skill."

Twenty per cent of the teen-age writers made a direct plea for a drag strip. They reasoned, to quote one, that "as long as Lake Charles has no supervised place to race cars off the public roads and superhighways, there will be a great increase in the number of automobile accidents."

However, a few of those who commented on drag racing felt a strip was not the answer. "I think speeding would increase if we had a drag strip," said one youth, "because every boy would be considered nothing unless he had a fast car." The racing, he said, would go on between scheduled drags.

A relatively large group (23 per cent) was critical of enforcement, but on the other hand seven per cent praised the police. Principal criticism centered around the practice of "hiding" to catch violators. Running a

To Page 43

SLOW DOWN AND LIVE RESTYLED FOR '60 DRIVE

by James R. Barrett

THE eighth of the annual Slow Down and Live campaigns, sponsored by the Association of State and Provincial Safety Coordinators, will start Memorial Day and continue through early September.

Governors, business and industrial leaders have already given their stamp of approval to an activity directed toward safe speed control during the busy summer months. Thousands of others have said that they intend to join in what promises to be one of the biggest and most popular of current safety drives.

Television, radio, newspapers and outdoor displays will carry the Slow Down message, along with a flood of pamphlets, posters and special materials that will be released at about the same time.

Supporters of the movement predict that the number of promotional items will exceed the 81 million produced last year. The great many inquiries and expressions of interest voiced in the early months of the year seem to justify this view.

Reshaped and invigorated year by year, the theme for 1960 stresses the satisfaction and rewards that safe driving brings. The thought expressed in the slogan "Highway Safety Makes Driving Fun" will generally be presented against the familiar and well established backdrop of Slow Down and Live.

The positive approach has already won the approval of police and educational groups—both of which have long been mainstays of the program.

Countless educational devices have been used to acquaint the public with the aims and purposes of the speed control projects. Charts, graphs and narrative material have all been employed to explain that speed, a principal accident factor, takes on added significance during busy travel periods. Police, of course, add to general speed consciousness through the all-out enforcement of speed regulations during the summer months.

A warm and enthusiastic reaction to the 1960 approach has been shown at all of the regional meetings. Here, discussions of purpose and program were greeted with pledges of support from some of the best and most able organizations in the field. The following, while by no means complete, is representative of those who this year plan to join the Coordinators in their summer safety work: The National Safety Council, the Auto Industry's Highway Safety Committee, the Petroleum Industries Committee, Esso Standard Oil, the Pan-American Coffee Bureau, the Outdoor Advertising Association, the Insurance Institute for Highway Safety, the Armed Forces Traffic Safety Committee, and numerous civic, fraternal and service groups.

The program and promotion are entirely in the hands of the Association of State and Provincial Safety Coordinators. Each of the 63 members of the association is an official and represents some one state, Canadian province or the Commonwealth of Puerto Rico. The membership as a whole selects the theme and sets the operating pattern for the year. Staff and secretarial assistance are provided by the Insurance Institute for Highway Safety.

Information about Slow Down and Live or any of the Coordinators' many interests may be obtained either from individual members or from Emerson Westwick, executive secretary, 1710 H Street, N.W., Washington, D. C.

Interested groups are invited to participate in the 1960 program.

James R. Barrett is president of the Association of State and Provincial Safety Coordinators.

More Light for Night Driving

Reflectorized right shoulder guide lines and license plates meet with growing acceptance

NIGHT driving in 1960 is far different than it was 25 years ago. Then, feeble headlights cast a dim yellow glow on the highway ahead. Curves and other changes in the roadway lay hidden until that last moment as the driver plunged forward into the unknown.

Driving is different today. The night is as black as ever, but modern engineering has brought new light to bear on much of our highway system. Today's powerful sealed-beam headlights knife through the darkness to search out the hazards ahead. But even more important, thousands of miles of the nation's highways literally come alive with light at night, thanks to countless billions of little glass spheres in warning signs and pavement markings. These tiny beads which borrow light from vehicle head lamps are the heart of most reflectorized materials.

Highway engineers recognized from the beginning that reflectorization would be a great help in moving more traffic safely. Today the advantages of reflectorization are well known not only to the experts but also to the traveling public.

The *Manual on Uniform Traffic Control Devices,* published by the Public Roads Administration, recommends that all warning signs (with the exception of pedestrian signs and urban parking signs) be illuminated or reflectorized. The Manual also specifies that "all rural pavement markings, if having application at night, shall be reflectorized."

Reflectorization has had wide acceptance in the applications recommended by the Manual—rural warning signs and center line pavement markings. Where reflectorization is not used in these areas, it is usually because of cost.

Reflectorized white skip-dash lines are now used by practically all states to establish the center line of two-lane pavements and to provide lane lines on four-lane pavements. Such center lines reduce the likelihood of one of the most common types of accidents—the head-on collision.

Today there are two growing uses for reflectorized materials—(1) right shoulder guide lines or edge markings, and (2) automobile license plates.

Guide Lines

A guide line, as its name implies, guides the motorist by marking clearly the edge of the road. This is especially helpful on roads with turnoffs at slight angles to the roadway. Here momentary confusion on the part of the motorist can lead to disaster. Where edge markings are used, indecision is kept to a minimum.

"An edge line," says Bernard B. Twombly, traffic engineer, Massachusetts Department of Public Works, "is found to be very useful during fog, smog, rain, darkness, where there are soft shoulders, curves, bridges and approaches to ramps. An edge line will tend to attract a motorist to the right side of the roadway, leaving a lane free for traffic."

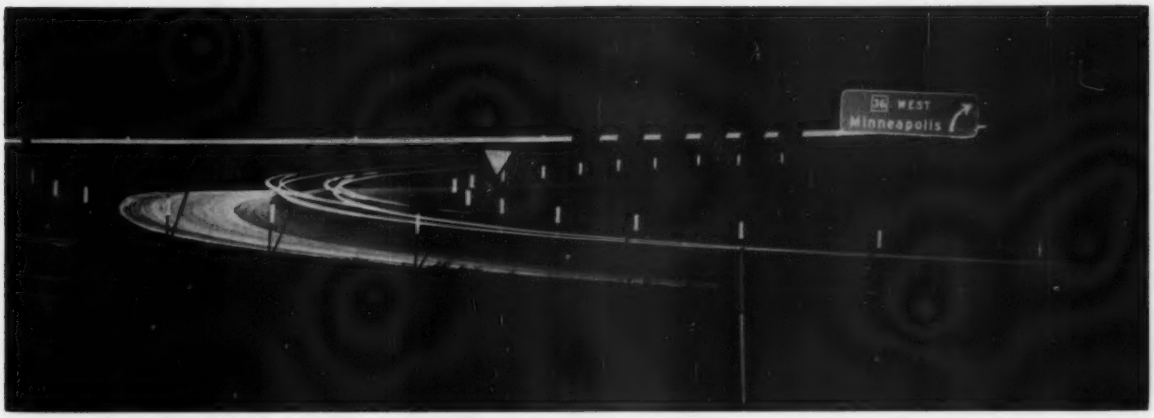
Interstate highway travelers in this first year of the sixties will find that there is widespread use of shoulder striping. More than 60,000 miles of highway are so marked and much of this is reflectorized. Forty-six states and one territory report laying some 50,000 miles of reflectorized pavement edge markings.

The state of Michigan conducted tests with reflective edge lines. They reported an 80 per cent decrease in fatalities, a 46 per cent reduction in injuries and an 11 per cent reduction in total accidents in the test area.

In an article in TRAFFIC SAFETY (Sept., 1957), James Halverson, chief traffic engineer for the State Road Commission of Utah, reported how edge lines helped reduce accidents in his state.

A study was conducted over a 7.88 mile stretch of Utah highway. In a 19 month period before the application of guide lines there were 29 accidents. In the nine month period following application of a four inch reflectorized stripe, 18 inches from the pavement edge, there were eight accidents. Most interesting result of the study was the great decrease in side-swipe-overtaking accidents, down from nine to one.

During 1960, Wisconsin plans to add 1,000 more miles of highway to the 1,500 miles previously edge-striped. Wayne Volk, state traffic engineer, said that the safety record of the striped roads, compared with those that have no painted edges, would be a determining factor in deciding how much more striping to undertake. Results from three experimental projects in 1958 indicated that the white lines



would reduce accidents 15 per cent or more, he said.

The state of Kansas found that edge lines resulted in safer rural roads. According to A. J. Basile, engineer of traffic services, Kansas State Highway Commission, there were approximate reductions of 30 per cent in the accident rate and 44 per cent in the fatality rate for the initial 10 sections of highway, involving a total 101.1 miles, on which edge marking had been applied.

The application of guide lines to a highway in one state had an unexpected effect—a temporary increase in accidents. In 1955, the first edge lines were placed by the Illinois Division of Highways on two sections of road in the northern part of the state. In 1957, before-and-after studies were made. "These studies," says H. H. Harrison, engineer of traffic, "indicated that drivers utilized the advantage given them by the edge line and drove faster. There were more accidents after the edge-line painting and, of these, three times as many were caused by driving too fast for conditions."

Use Guide Lines at Hot Spots

The Illinois edge striping program was expanded in 1958 using a four inch rather than a five inch strip and limiting the edge lines to curves, narrow bridge approaches, pavement transitions and at other locations where such lines might be helpful under adverse seeing conditions. A 1959 survey of four sections of highway totaling 40 miles showed that there was a 23 per cent reduction in accidents, and a 50 per cent reduction in the cause "too fast for conditions." A newly enacted Illinois speed limit law and a nationwide accident reduction in 1958 are not separable from these figures he said.

The New York Thruway authorized the installation of 506 miles of reflectorized striping in 1959. Edge stripes had previously been used by the Thruway only at bridge sites. Ramps at the various interchanges and service areas were included in the project.

In Canada, seven provinces have adopted this night safety measure. Started in Alberta, Ontario and Saskatchewan in 1957, use of shoulder guide lines spread to Manitoba, Nova Scotia, Quebec and New Brunswick. Eight provinces plan to extend its use in the future according to a recent survey made by Cataphote, a manufacturer of reflectorized materials. One province plans to add edge lines to secondary roads.

Some highway officials report a money saving byproduct from the use of edge striping. They find it reduces shoulder maintenance costs by keeping cars on the road and off the shoulders. However, the principal drawback to the use of guide lines is one of cost. State highway officials report a great variation in cost from as low as $70 to more than $150 per mile for both lines. North Carolina greatly reduces the cost of edge lines by painting a five foot line followed by a 35 foot skip.

There are various methods of reflectorizing pavement markings. The most common method is to apply a paint that contains the reflective beads or to sprinkle the glass beads on top of wet paint. The state of Ohio, which has edge-marked more than 14,500 miles of highway, has used more than 1,250,000 pounds of these tiny beads.

License Plates

Along with the increased use of reflectorized materials on highways there has been a steady growth in state adoption of reflective license plates. In many states the use of reflectorized plates has been sparked by an effort to reduce the danger of collision with parked or stalled cars. The reflectorized plates provide an extra margin of safety when a stalled auto's electrical system fails or when it is necessary to move a vehicle with defective lights. Also, when one headlight is inoperative, the reflective front plate orients approaching drivers on the lateral roadway placement by indicating which headlight is out. The driver knows that the one-eyed vehicle is not a motorcycle.

The reflectorized plates are ordinary plates surfaced with a sheeting which reflects the headlights of oncoming cars back to the driver. Where reflective plates are used, the front plates can be read at night even in the competitive glare of the vehicle's headlights. This feature aids law enforcement officers in their search for "wanted" cars, as the increased readability allows car checks both day and night.

University of Illinois researchers,

working in cooperation with Illinois Secretary of State Charles Carpentier, have found that the application of light-reflecting materials can increase night legibility by 28 per cent. Some tests have indicated that the plates are visible up to four times as far as ordinary plates.

Eight states and one territory are now using reflectorized plates. They are Delaware, Louisiana, Maine, Minnesota, North Dakota, Wyoming, Hawaii and Puerto Rico. Maine began reflectorization in 1949. Most of the other states have been using the system for five years or less. A number of other states are using reflective validation tabs. Still others are conducting tests on a limited number of vehicles. Alabama is testing reflectorization on commercial vehicles and several states are trying it on state-owned cars.

Plate Cost Varies

The cost of reflectorized plates varies, depending on the type of treatment. Generally, the brighter and more durable the reflectivity, the more it costs. An extremely durable reflective sheeting is available for states with "permanent" plates — such as Maine, which uses the same plates for a five year period.

Lt. Williard R. Orcutt, acting director of the Bureau of Traffic Records of Maine's state police quotes statistics to show the effectiveness of using reflectorized plates: "I believe it has effectively reduced collisions of motor vehicles in the nighttime, especially while vehicles are parked without lights. For the three years immediately prior to using reflectorized plates, we realized a total of 298 accidents involving parked vehicles. In the three years immediately following the use of reflectorized plates, this total fell to 73."

Lt. Orcutt also points to the advantage of the license plate in enforcement work. "It is now possible for troopers to read the license plates at night of vehicles approaching from the opposite direction even though they do not dim their headlights."

Safety Bonus in Minnesota

The state of Minnesota reported safety benefits from the first full year of use (1956) of reflective license plates. They proved a definite contributing factor to the decrease recorded in fatal nighttime accidents (while daytime fatal accidents increased) and to the fact that the rate of increase for all nighttime accidents was considerably below the rate of increase for all daytime accidents.

Minnesota found an unusual safety bonus in the plates. It was discovered that thousands of reflectorized license plates that had been turned in to the secretary of state when cars were sold out of state or junked could be utilized for marking curves and other hazards at night. More than 25,000 license plates have been cut into strips and mounted on guard rails, dead-end barries and other locations on the state's rural highways.

The principle safety advantage of reflectorization comes on poorly lighted roads. The plates have no particular advantage in well-lighted areas and are of limited extra utility on well-lighted vehicles. Mud, traffic film, snow and ice reduce the effectiveness of the plates.

Five Year Plate Cuts Cost

While the above factors limit to some degree the effectiveness of the plates, there is really only one disadvantage to the plates—the cost. In order to overcome this single disadvantage the state of Maine issues plates for five year periods and validates them each year with a new tab. The total cost per set of license plates per year (including the original plates and the yearly tabs) is 17 cents. This compares with the previous annual cost of 30 cents per set of standard plates.

Of course, there are problems with the five year plates. The value of reflectorization might be somewhat reduced with age through scratching, bending, etc. This is especially true on cars where the plates are not in recessed locations. However, with the adoption of standard license plate dimensions by the American Association of Motor Vehicle Administrators and their acceptance by the states, the manufacturers of automobiles now have the opportunity to build recessed and protected receptacles for license plates.

Reflective plates provide autos with night safety device that works independently of car lights.

A night shot showing use of right shoulder guide line on major expressway. Line is reflectorized.

Council Honors Press, Radio, TV For Exceptional Safety Service

The National Safety Council has conferred a total of 474 Public Interest Awards on media of all categories for exceptional service to safety in 1959.

The non-competitive award annually honors organizations in the mass communications field.

The 1959 award went to 51 daily and 14 weekly newspapers, 2 news wire services, 5 radio and 4 television networks, 144 radio and 48 TV stations, 1 radio-TV syndicate, 19 general and 53 specialized magazines, 6 labor publications, 50 advertisers and 72 outdoor advertising companies.

The Public Interest Award was established to honor leadership, initiative and originality in the furtherance of accident prevention by the media.

"No attempt is made to choose the best or the next best," said Howard Pyle, National Safety Council president, in announcing the winners. "Only continuous—not sporadic—efforts are considered by the judges."

Judges were Norman Damon, vice president, Automotive Safety Foundation, chairman; George Brandenburg, Midwest editor, *Editor & Publisher;* George D. French, vice president, Outdoor Advertising, Inc.; Frederick H. Garrigus, manager of organizational services, National Association of Broadcasters; Wesley I. Nunn, advertising manager, Standard Oil Co. (Ind.), and Dr. Albert A. Sutton, professor of journalism, Northwestern University.

Salt Lake City's *Deseret News'* work with child safety helped newspaper to win a PIA Award.

Each winner will receive a plaque. Radio, TV and advertiser award winners will be considered for the Alfred P. Sloan Awards for Highway Safety, which are to be judged at a later date.

Short Courses

July 11-15—Mountain Region Traffic Court Conference — University of Denver, Denver, Colo.

July 18-29 — Accident Investigation —University of Maryland, College Park, Md.

September 12-16 — Motor Fleet Supervisor—Pennsylvania State University, University Park, Pa. Contact: Amos E. Neyhart

September 12-16 — Southern Region Traffic Court Conference—University of Tennessee, Knoxville, Tenn.

September 12-23 — Police Training Course (subject to be announced) —University of Tennessee, Knoxville, Tenn.

September 12-30 — Fundamentals of Police Traffic Service—Northwestern University Traffic Institute, Evanston, Ill.

September 15 — 1960-1961 — Traffic Police Administration Training Program — Northwestern University Traffic Institute, Evanston, Ill.

September 19-23 — Motor Fleet Supervisor—Ontario Safety League, Toronto, Ontario, Canada. Contact: Frank C. DeVenne

September 26-30—Trainers of Commercial Drivers — Pennsylvania State University, University Park, Pa. Contact: Amos E. Neyhart

Julien H. Harvey, Safety Pioneer, Dies

Julien H. Harvey, 75, nationally known pioneer in traffic and industrial safety and reputed author of safety's "Three E's," died of a heart attack March 1 in New Canaan, Conn.

Mr. Harvey was born in Marshall, Mo., August 23, 1884. After graduating from the Kansas City School of Law he was admitted to the bar and soon after was employed by the Traction Company of Kansas City to organize their safety program. In 1916 he helped organize the Kansas City Safety Council and became its first president.

Mr. Harvey's success soon became widely known and he was called upon to help organize the Kansas State Safety Council. While outlining to public officials and educators of Kansas the fundamentals of accident prevention he pointed out that greatest results would be attained through the use of three tools — education, engineering and enforcement. It is believed that this was the origin of the now fundamental "Three E's" of safety.

In 1918, Mr. Harvey was asked to organize the nation's first complete community safety program in Rochester, N. Y. For nine years he was in charge of the National Safety Council's field service for local safety councils and later became the first executive vice-president of the Greater New York Safety Council.

In 1938, he became head of the accident prevention department of the Association of Casualty and Surety Companies. He was one of 10 outstanding safety leaders called to Washington in 1946 to organize the President's Highway Safety Conference.

After his retirement from the Association of Casualty and Surety Companies in 1951, Mr. Harvey served as managing director of the New Haven, Conn., Safety Council from 1953 to 1955. He then became a supporting member of the Council.

Mr. Harvey was a member of the board of directors of the National Safety Council, Greater New York Safety Council, and the Center for Safety Education at New York University, of which he was a co-founder. He was a life member of the American Society of Safety Engineers, a trustee of the American Museum of Safety, an honorary member of the Institute of Traffic Engineers, and was active in many other organizations.

THE LEGISLATIVE HOPPER

Driver Education

New Bills Introduced

Arizona—*S. 80*—provides for system of driver training conducted by State Highway Patrol. *S. 112*—requires person convicted of speed limit violation to attend driver education course.

Maryland—*S. 39*—increases fees for learners permits to expand the driver education program in public schools.

New York—*S. 3029*—requires education commissioner to adopt regulations governing establishment and conduct of classroom and behind-the-wheel driver training in secondary schools. *H. 4339*—requires education commissioner to adopt rules and regulations governing driver education in secondary schools.

South Carolina—*H. 2183*—authorizes issuance of special restricted driver license to person holding instruction permit and issuance of instruction permits to students enrolled in driver training courses.

Virginia—*H. 675*—provides for establishment of a driver education program in public schools.

Juvenile Drivers

New Bills Introduced

Hawaii—*H. 105*—provides for trial of minors holding driver licenses in same courts as adults when charged with traffic offenses.

Kentucky—*H. 229*—permits issuance of instruction permits to persons who have reached age 15.

New Jersey—*HCR 30*—requests commissioner of motor vehicles to study issuance of probationary driver licenses to persons under 21.

New York—*H. 2672*—prohibits junior driver under 18 from operating vehicle in county adjacent to New York City. *S. 1921* and *H. 3052*—requires junior driver under 18 to be accompanied by parent when driving during hours of darkness. *H. 2894* and *S. 3351*—repeals provision for issuance of junior license to persons who have reached age 16 but have not reached age 18. *S. 2532*—prohibits a learner from operating a motor vehicle unless under immediate supervision of a licensed driver at least 18 years of age.

Rhode Island—*S. 168*—makes it unlawful for person under 17 to drive after midnight. *S. 231*—removes jurisdiction of juvenile court over person of 16 or over who is charged with vehicle law violation.

Virginia—*H. 2300*—amends procedures and conditions for issuance of driver license to persons under 18. *H. 378*—relates to revocation of driver license to person under 21. *H. 676*—amends provisions for issuance of licenses to minors.

Action and Additional Information

Kentucky—*H. 229*—permits issuance of instruction permits to persons who have reached age 15—passed House.

New York—*S. 570*—permits person with junior driver license to operate vehicle at night only if accompanied by parent—passed Senate. *H. 753*—permits person with junior driver license to operate vehicle at night only if accompanied by parent—killed, House. *S. 569*—prohibits use of junior driver license in Nassau County—passed House and Senate.

Virginia—*H. 103*—permits certain counties to prohibit persons under 18 from driving within county limits—passed House and Senate.

Executive Action

Maine—*H. 1016-X*—relates to juvenile offenders in certain vehicle law violation cases—approved.

Radar—Speed Measuring Devices

New Bills Introduced

New York—*H. 3546*—prohibits operation of vehicle manufactured after January 1, 1961 unless it is equipped with speed governor limiting speed to 65 m.p.h.

Motor Scooters—Motorcycles

New Bills Introduced

Michigan—*S. 1121*—permits carrying of number of passengers that motor driven cycles are designed to carry.

Action and Additional Information

Arizona—*H. 5*—repeals section that permitted issuance of restricted licenses for motor scooters to 14-15 year olds—passed House.

Chem Tests, Drugs

New Bills Introduced

Maryland—*S. 52*—requires physicians to report narcotic addicts to motor vehicle department.

Michigan—*H. 141*—allows sentencing judge to permit defendant in drunk driving case to keep driver license instead of forwarding same to secretary of state. *H. 334*—establishes evidentiary presumptions for chemical analysis of drunk drivers.

Mississippi—*H. 272*—provides for one year revocation of driver license upon forfeiture of bail on charge of driving under influence of liquor or narcotic drugs.

New York—*H. 3322* and *S. 2579*—fixes penalty for drunk driving at imprisonment for 30 days to one year, fine of not more than $500 or both fine and imprisonment. *H. 3630*—permits fingerprinting of person arrested for drunk driving if previously convicted of such offense. *S. 2795*—makes persons guilty of assault in second degree who operates or permits operation of vehicle in culpably negligent manner or under influence of alcohol. *S. 2796*—makes evidence of criminal negligence in vehicle operation resulting in death admissable when there is certain percentage of alcohol in blood of operator. *S. 2800*—provides that in trial of civil or criminal action, evidence of alcoholic content of blood of vehicle operator may be admitted as *prima facie* evidence of reckless driving. *S. 2969*—makes it misdemeanor to operate vehicle while under influence of narcotic drug which renders driver incapable of safe driving. *S. 2930*—provides for fingerprinting of person accused of drunk driving.

Virginia—*H. 357*—prescribes evidence admissible upon trial on a charge of driving while under influence of intoxicants; provides that operation of motor vehicle on a public highway gives consent to a blood test. *S. 202*—relates to penalty for conviction of drunk driving. *S. 247*—relates to suspension and restoration of driver license of person committed to institution for habitual use of drugs or alcohol. *H. 569*—relates to chemical tests in drunk driving cases.

Action and Additional Information

Georgia—*S. 209*—changes penalties for driving while intoxicated—passed Senate.

Kentucky—*H. 55*—prohibits operation of vehicle on public highway by person under influence of whiskey or narcotics—passed House.

New York—*H. 1035*—fixes punishment for conviction of driving while in intoxicated condition—passed House.

Virginia—*S. 36*—relates to admissibility in evidence of certificate of chief medical examiner as to results of chemical tests in drunk driving cases—indefinitely postponed, Senate.

Miscellaneous

New Bills Introduced

Michigan—*SR 14*—creates special committee to study preventive methods concerning highway safety.

New York—*H. 4350* and *S. 3460*—authorizes creation of temporary, twelve-member tri-state traffic safety commission to establish uniform basic standards for preventing accidents; three states involved are Connecticut, New Jersey, and New York.

Action and Additional Information

Colorado—*SJR 16*—directs legislative council to continue study of highway safety laws—passed Senate.

Georgia—*SR 134*—creates traffic safety study committee to compare laws of other states with those of Georgia and to make a continuing study of highway safety problems—passed House and Senate.

Kentucky—*S. 111*—requires bicycle riders to drive on left side of road facing vehicular traffic—passed Senate.

South Carolina—*S. 443*—provides for continuation of work of committee appointed pursuant to Senate Bill 154 of 1959 SL to investigate highway accidents and study methods of improving highway safety—passed Senate.

HEAD FOR THE CHECK LANE

National Vehicle Safety Check to stress off-the-job programs

DURING May and June, the Auto Industries Highway Safety Committee and Look Magazine will again sponsor the National Vehicle Safety-Check for Communities in states which do not require periodic inspection of motor vehicles. The program is conducted in cooperation with the National Association of State and Provincial Coordinators.

In preparation for the check lane operations, representatives of tire and automobile manufacturers have been working with state and local officials and citizen groups throughout March and April. They will continue to give assistance during May.

Objectives of the vehicle-check program are: 1) to arouse public awareness of the need for continual vehicle maintenance and for periodic safety checks, and 2) to provide free vehicle safety checks at community-sponsored lanes, in cooperating dealerships, garages and service stations, at military installations, in school- or teen-age-sponsored programs and at industrial plants.

The items checked at inspection lanes are: brakes, front and rear lights, steering, tires, exhaust system, glass, windshield wipers, rear view mirrors and horn.

Two of three vehicles registered and operating on streets and highways are not now officially checked to determine their safe driving condition. Only 15 states require periodic motor vehicle inspection. Fifty per cent of all vehicles inspected in these states are rejected each year because one or more parts require immediate service attention.

Speaking of the need for vehicle maintenance, Charles C. Freed, chairman of the Auto Industries Highway Safety Committee, said: "The number of traffic accidents in which unsafe vehicle condition is a factor is not always known, due to unrecognizable damage, lack of uniform accident reporting and unwillingness of many drivers to admit maintenance neglect."

Because of the growing participation by industries in the program during the past few years, the National Vehicle Safety-Check is intensifying its efforts in the area of employe safety-checks this year.

Reports from plants conducting employe vehicle check programs in the last two years show that 80 per cent carried out their employe programs in cooperation with the National Vehicle Safety-Check.

Nearly half of the employe programs invited the public to have cars checked at plant lanes. The largest number of vehicles safety-checked in any plant was 22,000. Most plants used one or two check lanes. More than 80 per cent of the employe programs were conducted on company property or on a street adjacent to the plant. About three-quarters of the safety checks were held before and after shifts; a fifth at lunch time, and a fourth during time off. Some plants conducted safety checks in all of these periods.

From a pilot project conducted as a community program in January, 1954, the Vehicle Safety-Check has grown into a significant nationwide activity. Last year, more than three million vehicles were checked for safe driving condition in more than 2,300 programs from coast to coast. When the statistics were compiled it was found that one out of every five vehicles checked required safety maintenance to one or more of the major items which affect safe driving.

For the fifth consecutive year, rear lights were most often found to be in need of service attention. Next in order of items most frequently found in unsafe condition were front lights, brakes, exhaust systems and tires.

Fifty-eight cities, 17 counties and 32 teen-age groups were selected as award winners in the 1959 program.

The city of San Francisco and San Diego County, Cal., won grand awards for conducting the most outstanding city and county programs in the nation. The Honor Driver Council of Ottawa County, Ohio, was named winner of the "Circle of Safety" grand award for conducting the most outstanding teen-age sponsored safety-check. Greeley (Colo.) Teen-age Safety Council received the "Circle of Safety" grand award for outstanding assistance to a community program.

Cars coming off assembly lines are inspected for mechanical fitness. Check programs help owners keep vehicles in safe condition.

NSC Christmas Cartoon Award Winners Announced

Cartoon Winner

The Jefferson City (Mo.) *Post-Tribune* has been named grand award winner in the National Safety Council's 17th annual Christmas Cartoon Project.

The winning cartoon was drawn by *Post-Tribune* staff artist Ward Degler. Both Degler and his newspaper will receive the Council's Public Interest Award for exceptional service to safety. In addition, Degler will get $300.

Judges were Roy Alexander, managing editor, *Time;* Robert U. Brown, publisher and editor, *Editor & Publisher;* Gordon Manning, senior editor, *Newsweek,* and Kenneth Stuart, art editor, the *Saturday Evening Post.*

Five cartoonists, four newspapers and a news syndicate also were cited by the Council.

They are the *Philadelphia Bulletin* and Franklin Alexander; the Victoria (British Columbia) *Daily Times* and Sid Barron; the Cumberland (Md.) *Times* and Joe Delaney; Newspaper Enterprise Association and John Fischetti, and the *Buffalo Evening News* and Bruce Shanks. The judges chose the six winners from 126 entries.

Many of the entries depicted the special theme of the National Safety Council's 1959 Christmas safety program—the moral responsibility people have to prevent accidents.

Since it began in 1943, the cartoon project has played an integral part in the Council's annual year-end campaign against the high accident toll occurring during the Christmas-New Year period.

Lowered Alcohol Blood Level For DWI To Be Considered

The Executive Board of the Committee on Alcohol and Drugs recently appointed a subcommittee to study the possibility of lowering the blood alcohol level at which a driver is presumed to be under the influence of alcohol. The subcommittee is to report its findings at the Committee's annual meeting in October. The subcommittee will also consider recommendations for an "Impaired Driving Offense" with suitable penalties for drivers found at concentrations of a lower level.

The board's actions were prompted by a number of recent studies in which it has been shown that there is definite impairment of driving ability at the 0.10 per cent blood alcohol level. At present, 0.15 per cent is the accepted level at which a person is presumed to be under the influence.

In terms of number of drinks, it takes from 6 to 10 drinks over a two hour period to reach the 0.15 level in the human body. For the 0.10 per cent level, it would take 4 to 8 drinks imbibed over a two hour period.

Many persons are too highly impaired to drive a motor vehicle after having only a few drinks, therefore, it was felt that necessary action should be taken against the social drinker to act as a deterrent to driving while seriously impaired from the effects of alcohol.

Detour Not A Detour

Until recently, a village in Michigan's Upper Peninsula community was known as the "Village of Detour."

But the village's 600 residents voted by a margin of six to one to change the name to "DeTour Village"—with the big "T."

The reason for the change was that highway signs on Interstate 75 expressway read "Detour—44 Miles."

Apparently, many motorists unfamiliar with the area thought the sign meant there was a highway detour, much to the distress of residents of Detour.

COMING EVENTS

May 2-4, Bethlehem, Pa.

Thirty-third Annual Eastern Pennsylvania Safety Conference (Hotel Bethlehem). Contact Harold A. Seward, Sec'y-Treas. Lehigh Valley Safety Council, 602 E. Third St., Bethlehem, Pa.

May 5-7, Richmond, Va.

Twenty-sixth Annual Conference of the Virginia Safety Association (Hotel John Marshall). Contact Hiram M. Smith, Jr., Virginia Safety Association, 2501 Monument Ave., Richmond 20, Va.

May 6, Denver, Colo.

Annual Traffic Safety Conference for State of Colorado (State Capitol Bldg.). Contact Duke W. Dunbar, chairman Colorado Highway Safety Council, 14 State Museum Bldg., Denver 2, Colo.

May 18-19, Tulsa, Okla.

Twelfth Annual Oklahoma Safety Conference (Mayo Hotel). Contact Bob Eastman, Manager, 1600 N.W. 23, Oklahoma City, Okla.

June 6-10, New York, N. Y.

Traffic Court Conference. Contact Jim Economos, American Bar Association, 1155 E. 60th St., Chicago 37, Ill.

June 16-17, Grand Forks, N. D.

Governor's Safety Conference. Contact Floyd J. Upham, Division of Public Safety, State Highway Dept., Bismarck, N. D.

June 19-22, Ithaca, N. Y.

Seventh National Conference on Campus Safety, National Safety Council. (Cornell University). Contact Francis J. Quinlan, Campus Safety Association, Division of Safety, Cornell University, Ithaca, N. Y.

LEAGUE OF WOMEN VOTERS VETOES BLIND CORNERS

ANYONE who's been irritated by driving through one of those neighborhoods, or towns, that seem to abound with blind spots at nearly every intersection, would probably enjoy a motor trip through the eastern Oklahoma city of Muskogee. Since the local League of Women Voters carried out its traffic safety project two years ago, "blind corners" have largely been eliminated, and other improvements have been made in the parking and traffic situations.

When the League decided that '58 was the year to do something about worsening traffic problems in their growing town, a project was adopted that would result in the betterment of conditions through sound, achievable proposals. A by-product of the program's far-reaching results was the presentation to the league of a third place citation in the Carol Lane Awards for 1959.

These awards for traffic safety are made annually through a grant by the Shell Oil Co. and are administered by the National Safety Council in recognition of achievements through traffic safety programs by women's organizations.

Background material for the Muskogee project was obtained from the Eno Foundation, an organization devoted to study and research for highway traffic and parking improvement. A committee of league members was formed to study this material and to conduct the investigation which was divided into three separate studies.

The first was an examination of the blind corners, the second, a survey of Muskogee's through-street system and speed limits, and the last was concerned with parking problems on main streets.

The blind corner study, in itself, proved to be quite an undertaking. To begin with, this seemed to be the city's most urgent traffic problem. Muskogee had no ordinance regulating the planting of trees and shrubs or preventing the placement of other obstructions which could constitute a traffic hazard.

A map was secured from the police department which showed the location of all traffic accidents in the city. Assignment lists were made up from the high accident locations on this map and special report forms were run off to be used by committee members in checking the intersections.

Working in pairs, members listed the intersection visited, the corner and type of obstruction found there, and the degree to which it represented a hazard.

It took 40 members three weeks to carry out this phase of the project.

The traffic safety committee was headed by Mrs. Julian Fite, assisted by Mrs. Sam Loy and Mrs. Ernest Anthis Jr.

A need for more through-streets was advocated as a result of a study of this problem.

Checking speed limits, committee members reported that Muskogee's 30 m.p.h. law in residential and 20 m.p.h. in the business districts compared favorably with other cities of similar size.

By working with police officers and Traffic Engineer Buster Salyer, other members learned how a radar unit operates and the recommended way to determine speed limits.

The parking problem centered in the business district. Two years before, a survey had pointed out that angle-parking should be done away with as soon as off-street parking facilities made this possible. With the help of Salyer, a new study of these facilities was made.

The study found that spaces in off-street parking areas outnumbered those in metered facilities. In some instances, however, this space needed developing. Members of the committee assigned to the parking study interviewed parking lot owners about capacity, rates, condition of lots and extent of use. Maps were then made from this information showing the location of lots and their respective capacities.

To Page 37

Women actually visited high accident locations to find blind spots and see to what degree they were hazards.

In carrying out their traffic safety projects, the ladies also learned how radar units are used to enforce speed laws.

BOOSTERS

USE THESE AIDS . . .

Coordinated materials for a program winner

POSTERS

A set of six posters designed for the campaign. Subjects: home safety, vacation safety, swimming and boating safety, housekeeping, falls and one general campaign theme poster. These posters are in full color.

LEAFLETS

A set of six leaflets covering the same five safety topics as the campaign posters, plus a leaflet on hand tools. Each leaflet discusses safety as a family affair. Suitable for both off-the-job and on-the-job use. Printed in three colors, approximately 3″ x 6″.

BANNER

A big and colorful banner ideal for use over loading docks, etc. Measures 3′ x 10′. Printed in three colors on sturdy cloth . . . will add splash and life to your campaign. Indoor and outdoor models.

PLANT SCOREBOARD

These boards know the score! Silk-screened in bright colors on durable 1/8″ pressed wood, these big (17″ x 23″) boards broadcast *Safety Everywhere . . . all the time.* Put one in every department to add competition to the campaign. After the campaign, go right on using them.

HOME SCOREBOARD

A new idea for off-the-job safety . . . nothing like it before. Scoreboard features space to record emergency telephone numbers, handy message pad, space to record number of accident free days for the family. A unique device to help make the whole family safety conscious. Priced so low that most safety men will want to include it in their campaign.

TEASER ITEMS

Stickers, lapel buttons and table-desk easels. You can use these before the movie is shown to arouse interest . . . afterwards as personal reminders.

INCENTIVE ITEMS

Pens, key tags and pocket protectors to use as safety awards in departments with the best safety records.

For complete program information and prices on all items, send for the Council's illustrated *Safety Everywhere . . . all the time* brochure. Write: National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

NOW! An all-year, all-the-time safety campaign that will add new interest to your safety program.

Here's a new safety program idea from the National Safety Council. A campaign that will last all year and that will work for you on-the-job and off-the-job. The campaign is built around a full color family motion picture that makes a new mark in entertainment and safety education—and a catchy slogan and easy-to-remember symbol. It's the same kind of campaign used in national advertising programs; now it can work in your safety program.

For the next 12 months the Council will make available a wide variety of campaign materials, all coordinated with the new film, the slogan and the symbol. Some of these materials are described on these pages.

Continuity and repetition are the keys to a successful campaign of this type. The more materials you use, the greater the impact of your campaign on your employees. Arrange now to rent or buy the campaign film, and place your order for the recall materials. For a suggested program for organizations of various sizes—including costs—and for some ideas on launching and sustaining the campaign send for a free *Safety Everywhere . . . all the time* brochure. Write: National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

IN YOUR ACTION PROGRAM — MATERIALS

ORDERS FOR NEW POSTERS SHOWN CANNOT BE SHIPPED UNTIL AFTER JULY 1

A campaign built around the new motion picture . . . *Everywhere All the Time*

A safety film that's new and different. It doesn't preach, lecture, or try to sell a particular safety lesson. Shot on location in full color, this film portrays the story of an industrial worker, his wife and their teen-age son and daughter. A nice family. You wouldn't want anything to happen to them . . . but something almost does. Through an accident the family learns that safety is a family affair . . . something to be practiced everywhere . . . all the time.

A 23-minute sound motion picture.

Purchase
Stock No. 171.04. Each: 1, $185.00; 2, $180.00; 10, $175.00. Order from the National Safety Council.

Preview
Stock No. 172.04. Preview prints may be obtained from any of the Council's rental agents listed below. Preview films must be returned within 30 days or a charge of $25.00 will be made.

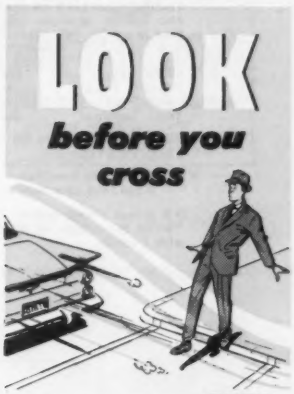
Rental
Stock No. 172.04. Film may be rented from the Council's rental agents. There is a rental charge of $25.00 per week or fraction thereof. Send your request to the booking office nearest you.

ASSOCIATION FILMS, INC.
EAST: Broad & Elm
Ridgefield, N. J.
MIDWEST: 561 Hillgrove Ave.
La Grange, Ill.
WEST: 799 Stevenson St.
San Francisco, Calif.
SOUTHWEST: 1108 Jackson St.
Dallas, Tex.
CANADA: CANADIAN FILM INSTITUTE
1782 Carling Ave.
Ottawa 3, Ontario—Canada

NEW TRAFFIC POSTERS FOR AUGUST POSTING

©NATIONAL SAFETY COUNCIL

T-1928-C 25x38
T-1929-A 8½x11½



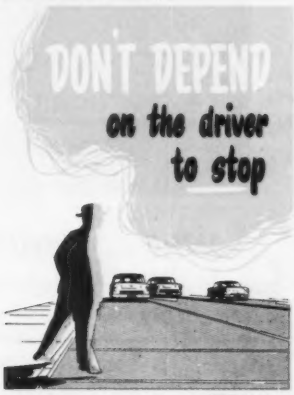
©NATIONAL SAFETY COUNCIL

T-1930-B 17"x23"

ALTERNATE POSTERS FOR AUGUST POSTING
(These posters may be ordered for immediate delivery)

©NATIONAL SAFETY COUNCIL

T-1691-C 25"x38"
T-1692-A 8½"x11½"



©NATIONAL SAFETY COUNCIL

T-1482-B 17"x23"

PRICES FOR ABOVE POSTERS

Traffic Posters—T-prefix to number

	1-9	10-99	100-999	1000-4999*
A Size	$0.17	$0.12	$0.07	$0.06
B Size	.30	.20	.165	.132
C Size	.40	.30	.24	.22

YOUR CREDIT LINE can be imprinted at time of the press run on Traffic B and C posters only. Orders for imprints on August posters above must be received by June 10, 1960.

Imprinting charges for these posters are $2.25 per lot plus an initial charge for each electroplate of $21.00 for C poster imprint and $12.50 for B poster imprint.

*Write for prices on quantities of 5,000 or more for special rates on annual poster orders.

PRICES SHOWN ARE SUBJECT TO A DISCOUNT OF 10% TO NATIONAL SAFETY COUNCIL MEMBERS

FLEET POSTERS

POSTER PRICES

Posters illustrated on these pages are included in the automatic Motor Transportation poster services. Automatic poster sets are available on yearly subscription that provides (4) subjects per month viz. (2) "A" size (8½"x11½") and (2) "B" size (17"x23"). Automatic service is provided in the following categories:

City Truck	City Bus	Annual price 1-4 sets, $9.90; 5-49, $7.80; 50 or more, $6.44.
Intercity Truck	Intercity Bus	
Sales Truck	Taxicab	
Truck Terminal	Bus Terminal	

Posters are available for individual selection at the following prices:

	1-9	10-99	100-999	1000-4999*
A size, any selection	.17	.12	.07	.06
B size, any selection	.32	.23	.195	.155

All prices shown are subject to a 10% discount to National Safety Council Members. *Write for prices on quantities of 5,000 or more. See page 29 for prices of posters with T-prefix.

©NATIONAL SAFETY COUNCIL

V-1887-B **17x23**

©NATIONAL SAFETY COUNCIL

1678-A **8½x11½**

©NATIONAL SAFETY COUNCIL

1017-A **8½x11½**

©NATIONAL SAFETY COUNCIL

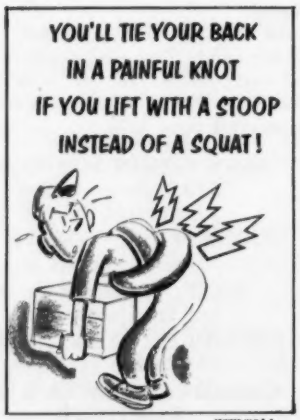
1816-B **17x23**

©NATIONAL SAFETY COUNCIL

1616-A **8½x11½**

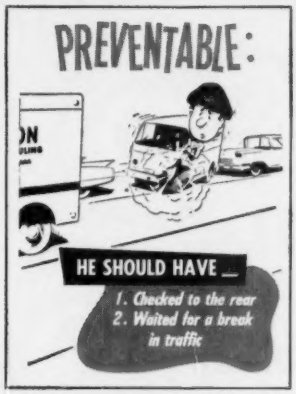
NATIONAL SAFETY COUNCIL

8324-A **8½x11½**



©NATIONAL SAFETY COUNCIL

1601-B **17x23**



©NATIONAL SAFETY COUNCIL

V-1886-B 17x23

©NATIONAL SAFETY COUNCIL

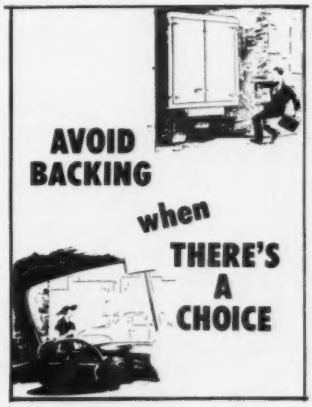
V-1885-A 8½x11½

©NATIONAL SAFETY COUNCIL

V-0789-B 17x23

©NATIONAL SAFETY COUNCIL

V-1089-A 8½x11½

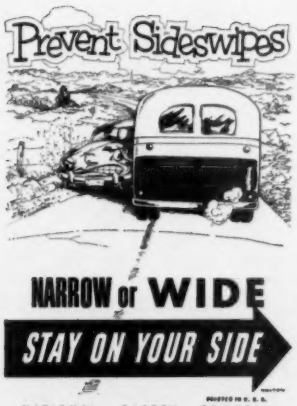


NATIONAL SAFETY COUNCIL

V-9965-B 17x23

NATIONAL SAFETY COUNCIL

V-8652-A 8½x11½



NATIONAL SAFETY COUNCIL

V-0241-B 17x23

NATIONAL SAFETY COUNCIL

V-7852-B 17x23

NATIONAL SAFETY COUNCIL

V-9414-B 17x23

Pacific Telephone Calls All Drivers

NOT long ago Captain Edward Gearhardt of the Marin County Fire Department in Northern California decided it was time the 36 members of his staff began brushing up on safe driving practices.

Captain Gearhardt merely dialed the telephone company for help.

It wasn't an impulse or desperation that prompted him to contact Pacific Telephone, however. Among the more than 150 community organizations and business firms in Northern California, the large utility company is known for its work in community traffic safety.

It was just 11 years ago that Pacific Telephone, historically safety-conscious, began a concentrated program to help reduce traffic accidents and improve driving habits.

Attitude the Key

Driving records of employes at the time had reflected a need for a program which would get to the heart of a little-recognized problem: Improving the attitude of the man behind the wheel, the driver himself.

In short, what was needed was a practical application of the familiar safety slogans and appeals to motorists.

Company leaders put their heads together, pondered the problem, and soon came up with a defensive driving program that since has attracted widespread interest and commendation.

Defensive driving was first intended as an employe safety program. But in succeeding years the program proved so successful that community organizations—like the Marin County Fire Department—were anxious to participate in it.

Soon large service groups, such as the U. S. Bureau of Reclamation and city police and fire departments, became interested and active.

To determine the feasibility of expanding the program, Pacific Telephone conducted an experimental campaign in Watsonville, Calif., in 1956. Through teamwork between the company and city and business organizations involved, the trial was a whopping success. Before long, the program was made available to other communities. In each, the meaning of defensive driving was described.

More than anything, participants learn, it is an *attitude*. A defensive driver is one who knows himself, his auto, and what both can and can not do.

Equally important, he realizes he *does not* know the attitudes or capabilities of any other driver. Thus, he must make allowances in his own actions and must anticipate potential accident situations.

Control, Concentration, Courtesy, and Caution are the key words in the program. Participants hear them first in preliminary discussions with a qualified driving instructor. The student is told in this introductory session what is expected of him. Next, he completes a driving questionnaire. The instructor studies the answers and, from them, shows the student instances where he would not be driving defensively, even though he might be driving lawfully.

The second phase of the program involves first-hand observations of the student's attitudes in actual traffic situations. These include railroad crossings, school zones, intersections, traffic signals, and turns.

It is in the third phase of the program that the student is made aware of his own and his auto's limitations. Behind the wheel of his car, the driver learns how smoothly he is able to brake. He observes his depth of perception. And he discovers the limits of his coordination.

Seeing Is Believing

Special testing equipment attached to his car shows him more vividly that at 20 m.p.h., for example, the "average" driver's vehicle will travel more than 20 feet just while the driver shifts his foot from the gas pedal to the brake. Even if a driver reacts immediately, the car travels an additional 20 feet before the driver can stop it, the student readily discovers.

In the final phase of the program, the entire defensive driving process is reviewed again. Changes in driver attitudes are checked and progress is carefully noted.

In promoting the program, Pacific Telephone, as a citizen in the community, has recognized its responsibility to promote better driving habits. It also found that having the campaign sponsored by local organizations fosters a keener awareness in citizens of the need for safe driving. Thus, teamwork and planning go hand in hand in the project.

Take Lodi, a community of some 20,000 residents in Northern California's fertile San Joaquin Valley, for example.

The local safety council was interested in defensive driving and agreed to sponsor the program locally. The Lodi telephone manager helped by surveying the area for organizations which could benefit most from defensive driving training.

Organizations on the list, including the police department, cab company and others operating fleets of vehicles, were contacted by letter from the Safety Council. Letters explained the program and asked for an expression of interest.

The mail survey was followed by personal visits. Fourteen organizations were enthusiastic about the program and agreed to participate. A preliminary meeting, in which the program was thoroughly explained, was held. So enthusiastic were the 14 organizations that they recruited five more groups.

Then Pacific Telephone safety experts went to work. They offered training in defensive driving practices to instructors from the various groups. Instructors, in turn, trained their own people. And the safety council and the phone company manager accepted the responsibility of coordinating the program.

Through such teamwork, defensive driving became an established fact. In the first three months alone, some 2,000 Lodi drivers were graduated from the course. The area's press published full accounts of the safety campaign.

To the 19 participating organizations went letters from the safety council, commending them for their progressive attitude toward safe driving.

The success of the Watsonville and Lodi ventures has been duplicated thus far with equally outstanding results in eight Northern California communities.

Community Version

Several of the communities have developed or modified a compulsory defensive driving program, based on the Pacific Telephone course, for traffic offenders. High schools, police and courts coordinate this activity.

Organization of defensive driving programs for still other communities is under way.

From evidence at hand it is apparent that the new concept in driver training has been just the thing to bolster sagging community safety campaigns and efforts.

Among the eight cities establishing the program, 224 men have been trained as instructors. They represent 153 local industries and service groups. Conservative estimates indicate that more than 25,000 vehicle operators have received defensive driving training.

And in the first 10 years Pacific Telephone has conducted the program, there has been a substantial decline in the company's accident rate in Northern California. Statistics show the rate dropped from one accident for every 45,531 miles driven in 1948 to one accident for every 102,137 miles driven in 1958. That's a decrease of 55 per cent in ten years!

Says a company official:

"Our long range plan is to develop defensive driving to its ultimate. We are convinced that this is a very worthwhile activity and is closely associated with our company's reputation for safety. It fills a real community need."

Perhaps the most fervent supporters of the program, however, are its participants.

"The further this program is extended, and the more key people and other people who receive training of this type, the safer the streets and highways will be," commented a cab driver.

"The final aim should be that all who possess a driver license must receive this training," he suggested.

Added a policeman: "It's too bad that everyone can't take a course like this. We would have better drivers on the highways if they could."

Student finds out how long it takes him to stop in emergency situation.

Donald Beeson, Watsonville Safety Council president, Paul Bournes, instructor, and George Whaley, telephone switchman, check up.

Circle Item No. 4—Reader Service Card

POTTERS REFLECTIVE GLASS SPHERES PROVIDE BRIGHTER REFLECTION, LONGER

Made of hard, clear glass shaped into uniformly perfect spheres, Potters Reflective Spheres are used on many of the nation's leading roads—proven performance is the reason. In standard and moisture-proof form, they provide brighter reflection for longer periods thus assuring greater highway safety and reducing maintenance costs.

For more than 40 years, the Potters name has been synonymous with reflection—you can count on it!

BUY REFLECTION — BUY POTTERS

A BAG • A TRUCKLOAD • A CARLOAD

prompt reliable delivery

WRITE FOR PRICES AND SPECIFICATIONS

POTTERS REFLECTIVE SPHERES PRS PROMOTE ROADWAY SAFETY

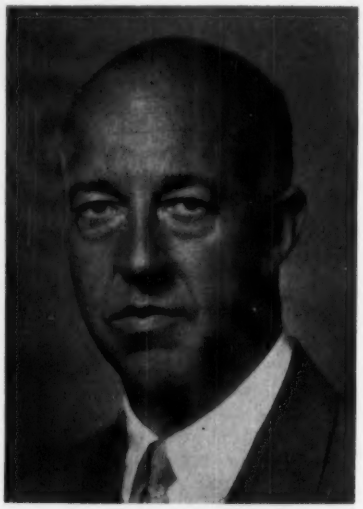
POTTERS BROS., Inc.

Largest Manufacturers of Reflective Glass Spheres
Since 1914
FACTORY AND MAIN OFFICE, CARLSTADT, N. J.
Webster 9-4976

THE MARK OF THE PROFESSIONAL SAFE DRIVER

New Delaware Council President

J. H. Tyler McConnell, secretary of the Hercules Powder Co., has been elected president of the Delaware Safety Council. McConnell, who is also a member of Hercules' board of directors and finance committee, has taken a prominent part in civic affairs, having served as a director of the Delaware Chapter of the American



J. H. Tyler McConnell

Red Cross and as chairman of its campaigns.

He has also been active in campaigns of the United Community Fund, Boy Scouts, Delaware Heart Association, American Cancer Society and other organizations. He was Democratic nominee for governor of Delaware in 1956 and was formerly chairman and member of the Delaware State Highway Commission.

Lighting Requirements Revised by ICC

The Interstate Commerce Commission has revised lighting requirements for commercial vehicles used in interstate commerce, effective August 1.

A synopsis of the new requirements, prepared by Ernest G. Cox, Chief, Section of Safety, Bureau of Motor Carriers, I.C.C., will be supplied by the National Highway Users Conference, Inc., National Press Building, Washington 4, D. C.

AIR DEFENSE COMMAND TAKES POSITIVE APPROACH

THREE years ago the Air Defense Command of the United States Air Force hit upon an idea that has paid off in reduced accidents, injuries and deaths. The idea was simply a campaign that would accentuate the positive in traffic safety education.

The command-wide 90-day program, which was conducted by Ralph M. Riley, ADC's ground safety director, and his assistant Ray D. McNeilly, stressed rewards for safe drivers rather than punishment for violators. It was so successful that it was repeated for the following two years.

Here's how the campaign worked.

It was announced that an intensive traffic safety program would be conducted for 90-days, and that at the end of that period a drawing would be held at which several valuable prizes would be awarded. The contest would be open to all ADC military personnel. In order to compete, an entrant must have signed a campaign card at the beginning of the program pledging his safety for the period, AND he must have completed the period accident and injury free and must not have received a citation for a moving traffic violation during the contest period.

The first ADC safety reward program was conducted during the October-December 1957 period. A Studebaker Golden Hawk was given as top prize with prizes totaling $2,500 in savings bonds to lesser winners. Named the *Drive Safe* campaign, it was aimed at the under-25-year-old airman. When compared with the same period of the previous year, a 20 per cent reduction in vehicle accidents and a saving of four lives was experienced.

A similar program was conducted during the October-December 1958 period. This was called the *Sure Safe* campaign, and it was open to all ADC military personnel. A new Ford station wagon was the top prize and a $500 Bell and Howell camera and projector was the second place award. An additional total of $3,000 was awarded to the 1948 lesser winners. Results: seven fewer fatalities and a 30 per cent overall reduction in accident rates.

During 1958 the campaign was conducted during the July-September period. Named the *Life Saver* campaign, it too was a contest type endeavor open to all ADC military personnel. Two Studebaker Larks were presented the top winners. Cash prizes totaling $3,000 were also awarded. These ran from a top prize of $500 to 55 prizes of $5 each.

Bumper strips, posters and Information Services news releases were used to promote the campaign. Local units intensified their safety education, engineering and enforcement measures during the period. Handouts publicizing the campaign, local Miss *Life Saver* contests as well as TV and radio programs stressing the *Life Saver* theme proved to be very effective accident reduction tools.

The climax of the *Life Saver* campaign was an evening reception and buffet dinner in South Bend, Ind., followed by the awards ceremony.

The results of the campaign were even more favorable than ADC authorities had ever hoped for. There were 231 fewer military injuries, six fewer fatalities and an overall ground accident rate reduction of 31 per cent compared with the same months of 1958.

Even more encouraging statistics were compiled regarding improper driving. During this period there was a 51 per cent reduction in moving traffic citations. Driving under the influence of alcohol citations were reduced 60 per cent; reckless driving 66 per cent, and speeding 70 per cent.

Approximately 90 per cent of ADC's 120,000 assigned personnel signed cards pledging their safety during the campaign period. Pledges were received from all parts of the nation where there are ADC bases and installations. These individuals not only pledged their own safe conduct, but also that of their families and friends. This would mean that up to a half million people were influenced by the campaign.

Riley and McNeilly plan to enlarge the program somewhat for 1960, but it will still retain the positive approach of rewards for safe action.

Maj. Gen. Joseph D. Caldara, deputy inspector general for safety for the air force, watches as A/3c Dee Odie Smith, first place winner from Eglin Air Force Base, and M/Sgt. Edward M. Simek (extreme right), second place winner from Larson Air Force Base, receive their Lark keys from Harold E. Churchill, president of the Studebaker-Packard Corp.

Tips for Fleet Safety Men

YOUR ATTITUDE

● Maintain an attitude of cooperation. Be willing to give more than to receive. Adapt yourself to others and try to be an inspiration to them. Exude enthusiasm for your program. Go out of your way to make friends. Be congenial and learn names. Practice these things; they'll help you sell safety without being offensive.

YOUR APPROACH

● Play your various roles well: Being a safety man, you're primarily a salesman but you may also have to be a chaplain, a "go-between." You'll need to be something of a lawyer, too. A degree of mechanical knowledge is important.

● Let people know you are a safety man. Encourage them to ask questions and do your best to provide a prompt, correct answer. Use safety to illustrate that answer if you can. Do everything you can to become known as a Safety Information Bureau without forcing your program on others.

● Don't ask embarassing questions but be ready with accurate answers.

● When it's true, don't be afraid to say, "I don't know." Find the answer quickly and never fail to give information if you promise to do so.

● A question may seem trivial to you but it's important to the person who asked it. Listen intently.

DO'S AND DON'TS FOR NEW MEN

● Do all you can to promote the three E's—Engineering, Education, Enforcement.

Be available. Appear in person whenever possible. Cooperate with and seek cooperation from foremen and supervisors.

Be willing to grant a degree of flexibility in your program during peak business periods. But never condone an unsafe act.

Be willing to review a man's record and make an adjustment when possible.

Gain a degree of mechanical knowledge if that's a weak spot with you.

Be an example in your driving habits. Take extra pains to avoid violating traffic laws.

Give attention to your personal appearance. Be neat and clean.

Be prompt and careful in accident investigation and keep your correspondence and reports up to date.

Use discretion in fraternizing with fellow employees.

● Don't issue orders or bulletins that have no chance of success because there's no way to enforce them.

Don't force yourself or your program on others who have been with the company a long time, or those who are untrained in safety.

Don't disregard information brought in by a driver. Act on it immediately.

Don't talk down to an employee. Watch your voice inflection. Don't appear to be visibly irritated by another person. Promote participation by people you converse with.

—John A. De Pew

Director of Safety and Personnel
Dohrn Transfer Co.

St. Paul to Host Truck Roadeo

The 1960 National Truck Roadeo wil be held in St. Paul, Minn., Sept. 15-18.

A contract has been signed to lease the St. Paul Municipal Auditorium for the annual classic which pits the most skillful truck drivers in the nation against one another.

This will be the first time that the National Truck Roadeo has appeared in St. Paul, though it appeared in Minneapolis in 1953. Since the founding of the event in 1937, it has been held in Madison Square Garden, New York; the Boston Garden; the International Amphitheater, Chicago; the Washington, D. C. Armory; and the Miami Beach Exposition Hall.

Once again there will be five classes of competition — straight truck, three, four and five axle tractor trailers and tank truck.

Winners in each of the five classes receive $50 monthly for a year from the American Trucking Associations, while runners-up are awarded $30 monthly. In addition, the national champions are awarded large trophies which they retain as long as they successfully defend their titles. Small permanent trophies are awarded to both the national champions and the runners-up.

Contestants in the roadeo will take written tests on safe driving rules, knowledge of the trucking industry, first aid and fire fighting on September 15. Semi-finals, featuring tests of driving skill and tests on personality and appearance, will be held Friday and Saturday, with the finals scheduled for Sunday afternoon. The traditional "Banquet of Champions," honoring all drivers who compete in the roadeo, will be held Saturday evening at the St. Paul Hotel.

This will be the last year that defending champions in each of the five classes of roadeo competition will be entitled automatically to enter the national roadeo without winning a state championship. Under the new rule, which will be in effect for the 1961 roadeo, all contestants will have to win state championships before they can compete in the national roadeo.

Ladies Act

From Page 27

After two months of study, the League recommended that the city council pass an ordinance on blind corners; that a new system of through-streets be designated; that skip parking be tested on a main street. It was also suggested that the city traffic engineer be made an ex-officio member of the city planning commission.

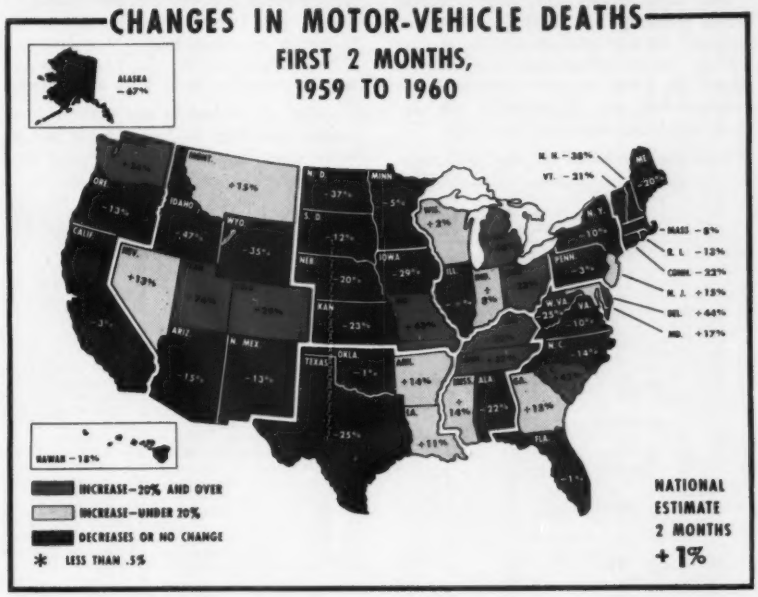
The league then held a meeting and invited the city council, police department, public works committee, park department, safety council, retail merchant's association, city manager and the traffic engineer. These organizations and individuals had helped with or supported the league's program. A report on the project and the results of its studies was made at this meeting.

The league's efforts directly resulted in the passage and enforcement of a blind corner ordinance; revised speed limits; parking improvements through additional 10¢ meters downtown and all-day meters in off-street parking areas, and the restriction of parking to one side of 11 streets. A large number of through-streets were designated and marked with Stop and Yield signs on intersecting streets. Angle-parking was eliminated in some areas. The project also prompted active participation and leadership of league members in the safety council.

Indirectly, the project resulted in the establishment of an accident card file kept by intersections; the removal of all unauthorized signs and markings in the business district; the installation of all traffic signs in accordance with the U. S. Bureau of Public Roads accepted standards; turns restricted in certain areas; a revised loading zone ordinance; and an ordinance governing the removal of curbs.

Muskogee city officials have shown that they are ready to support programs like the traffic safety improvement project. The League of Women Voters won the following commendation from City Manager C. Clay Harrell, "Too often everybody's business becomes nobody's business. But when a group such as yours makes traffic safety its business, the community is going to be a better place in which to live."

THE TRAFFIC RECORD



MOTOR VEHICLE DEATHS AND CHANGES

Months	DEATHS				PERCENTAGE CHANGES				
					Corresponding Month			4 Mos. Mov. Ave.*	
	1956	1958	1959	1960	1956-1960	1958-1959	1959-1960	1958-1959	1959-1960
January	2,954	2,709	2,760	2,870	— 3%		+ 4%		0%
February	2,652	2,398	2,420	2,370	—11%		— 2%		+ 1%
Two Mos.	5,606	5,107	5,180	5,240	— 7%		+ 1%		
March	2,940	2,598	2,810			+ 8%		+ 1%	
April	2,970	2,595	2,700			+ 4%		+ 4%	
May	3,094	2,937	3,150			+ 7%		+ 5%	
June	3,338	3,078	3,230			+ 5%		+ 6%	
July	3,555	3,098	3,260			+ 5%		+ 5%	
August	3,535	3,550	3,550			0%		+ 4%	
September	3,653	3,325	3,320			0%		+ 2%	
October	3,476	3,586	3,450			— 4%		0%	
November	3,603	3,526	3,490			— 1%		— 1%	
December	3,858	3,581	3,660			+ 2%		— 1%	
Total	39,628	36,981	37,800						

All 1956 and 1958 figures are from the National Office of Vital Statistics. The 1959 and 1960 figures are National Safety Council estimates.

The 1960 national estimate is arrived at by assuming that the percentage change from 1959 to 1960 in the states reporting for both years reflects the 1959-1960 change in the entire country. First reports are preliminary, so revisions are made from time to time as later reports are received for the various months. Thus, figures above for 1960 may differ slightly from figures for the same months which will be published in future issues of TRAFFIC SAFETY.

*Four Months Moving Average is based on changes between the totals for four months instead of one month. For example, the February figure shows the change between the totals for November-February 1959 and November-February 1960, etc. Adding several months together tends to smooth out single month changes which may be affected by differences in the number of weekends in a month from one year to the next, random variations, etc.

TRAFFIC DEATHS—CITY RECORDS

The table covers only motor-vehicle deaths resulting from traffic accidents that occurred in the city. Nontraffic motor-vehicle deaths (where the accident occurred on home or work premises) are not included; nor are deaths in the city from accidents occurring outside.

Rankings are based on the 1960 registration death rate which is the number of deaths per 10,00 registered motor vehicles on an annual basis. Vehicle registration figures are for the year 1959 and were supplied by R. L. Polk & Company.

Cities are ranked by registration death rates—from high to low. When two or more cities have exactly the same rate, ranking is by total vehicle registrations—from large to small.

Cities shown in heavy type have improved in 1960 compared with 1959.

The population death rate is the number of deaths per 100,000 population on an annual basis. Populations are as of April, 1950, or later censuses taken by the U. S. Bureau of the Census.

	Two Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
ALL REPORTING CITIES				2.3	9.3
Group I (1,000,000 and over)					
1. Chicago, Ill.	**30**	**33**	**41**	**1.8**	**4.8**
2. Philadelphia, Pa.	**22**	**23**	**22**	**2.6**	**6.3**
All cities in this group				3.3	8.9
3. Los Angeles, Calif.	71	55	59	3.5	19.0
4. Detroit, Mich.	39	19	21	3.6	12.1
5. New York, N. Y.	**93**	**143**	**117**	**4.0**	**7.2**
6. Baltimore, Md.	24	18	24	4.5	13.9
Group II (750,000 to 1,000,000)					
1. St. Louis, Mo.	14	14	12	2.7	9.8
All cities in this group				4.1	13.4
2. San Francisco, Calif.	22	15	13	4.5	17.0
3. Washington, D. C.	17	11	5	4.5	12.1
4. Cleveland, Ohio	23	17	18	4.8	14.9
Group III (500,000 to 750,000)					
1. Milwaukee, Wis.	**7**	**12**	**7**	**1.3**	**5.9**
2. Seattle, Wash.	**10**	**11**	**15**	**2.1**	**10.4**
3. Buffalo, N. Y.	**8**	**12**	**14**	**2.1**	**8.1**
4. Dallas, Tex.	11	11	14	2.2	11.4
5. Houston, Tex.	**16**	**22**	**19**	**2.3**	**13.5**
All cities in this group				2.6	11.0
6. Cincinnati, Ohio	10	8	7	2.7	10.4
7. Pittsburgh, Pa.	12	7	17	3.6	10.6
8. San Diego, Calif.	**13**	**14**	**14**	**3.9**	**15.6**
9. New Orleans, La.	14	8	9	4.6	13.9
Group IV (350,000 to 500,000)					
1. Birmingham, Ala.	**3**	**12**	**8**	**1.3**	**5.0**
2. Denver, Colo.	**7**	**8**	**5**	**1.5**	**8.8**
3. Oakland, Calif.	**4**	**10**	**5**	**1.6**	**6.2**
4. Atlanta, Ga.	**5**	**10**	**11**	**1.6**	**6.1**
5. Indianapolis, Ind.	8	5	6	2.2	10.4
6. Portland, Ore.	**10**	**11**	**7**	**2.5**	**14.6**
7. Memphis, Tenn.	8	4	5	2.7	9.8
All cities in this group				2.7	11.8
8. Louisville, Ky.	8	8	9	3.1	11.8
9. San Antonio, Tex.	16	6	9	4.5	21.1
10. Kansas City, Mo.	18	8	5	6.9	22.5
Group V (200,000 to 350,000)					
1. Grand Rapids, Mich.	**0**	**5**	**4**	**0.0**	**0.0**
2. Toledo, Ohio	1	1	3	0.4	1.7
3. Providence, R. I.	**1**	**2**	**3**	**0.5**	**2.4**
4. Miami, Fla.	**3**	**12**	**10**	**0.8**	**6.9**
5. Wichita, Kan.	2	1	1	0.9	5.3
6. Omaha, Neb.	**2**	**4**	**2**	**1.0**	**4.3**
7. Worcester, Mass.	**1**	**2**	**4**	**1.0**	**3.0**
8. El Paso, Tex.	**2**	**11**	**7**	**1.4**	**4.8**
9. Flint, Mich.	3	1	2	1.7	8.3
10. Dayton, Ohio	5	3	3	2.0	10.0
11. Oklahoma City, Okla.	6	5	4	2.0	12.6
12. Rochester, N. Y.	5	3	4	2.2	8.7
All cities in this group				2.2	10.6
13. Jacksonville, Fla.	6	4	6	2.3	14.4
14. Honolulu, Hawaii	**6**	**7**	**5**	**2.4**	**14.5**
15. Fort Worth, Tex.	**7**	**9**	**8**	**2.6**	**12.7**
16. St. Paul, Minn.	7	3	7	3.0	13.4
17. Norfolk, Va.	5	0	4	3.3	10.3
18. Tampa, Fla.	8	6	6	3.5	17.8
19. Richmond, Va.	7	3	4	3.5	17.7
20. Akron, Ohio	8	8	6	3.7	15.6
21. Syracuse, N. Y.	5	0	0	3.9	14.0
22. Long Beach, Calif.	15	5	2	5.8	26.8
Group VI (100,000 to 200,000)					
1. New Haven, Conn.	**0**	**3**	**1**	**0.0**	**0.0**
2. Trenton, N. J.	**0**	**2**	**1**	**0.0**	**0.0**
3. Rockford, Ill.	**0**	**2**	**0**	**0.0**	**0.0**
4. Arlington, Va.	**0**	**1**	**0**	**0.0**	**0.0**
5. Hartford, Conn.	0	0	0	0.0	0.0
6. Wilmington, Del.	0	0	0	0.0	0.0
7. Lansing, Mich.	0	0	2	0.0	0.0
8. Jackson, Miss.	**0**	**6**	**0**	**0.0**	**0.0**
9. Saginaw, Mich.	0	0	0	0.0	0.0
10. Lincoln, Neb.	0	0	1	0.0	0.0
11. Roanoke, Va.	0	0	1	0.0	0.0
12. Niagara Falls, N. Y.	**0**	**1**	**1**	**0.0**	**0.0**
13. Utica, N. Y.	0	0	0	0.0	0.0
14. Fresno, Calif.	**1**	**2**	**0**	**0.7**	**4.9**
15. South Bend, Ind.	1	1	1	0.9	4.6
16. Chattanooga, Tenn.	**1**	**3**	**3**	**0.9**	**4.6**
17. Glendale, Calif.	1	1	4	1.1	5.2
18. Yonkers, N. Y.	1	0	1	1.1	3.3
19. Madison, Wis.	1	0	0	1.1	5.4
20. Spokane, Wash.	2	2	1	1.3	6.4
21. Duluth, Minn.	1	1	3	1.4	5.7
22. Albuquerque, N. M.	**2**	**7**	**3**	**1.4**	**7.1**
23. Waterbury, Conn.	1	0	1	1.5	5.3
24. Hammond, Ind.	**1**	**5**	**2**	**1.6**	**5.5**
25. Austin, Tex.	**2**	**4**	**1**	**1.6**	**7.3**
26. Kansas City, Kan.	**2**	**3**	**0**	**1.7**	**9.3**
27. Gary, Ind.	2	2	2	1.8	6.8
28. Peoria, Ill.	2	0	0	1.9	10.5
29. Des Moines, Iowa	3	0	4	1.9	9.8
30. Nashville, Tenn.	3	1	8	2.1	10.3
31. Savannah, Ga.	2	1	1	2.2	9.2
32. Fort Wayne, Ind.	3	1	3	2.2	11.7
33. Montgomery, Ala.	2	1	2	2.2	10.3
All cities in this group				2.2	10.6
34. Baton Rouge, La.	**3**	**4**	**5**	**2.4**	**11.9**
35. Berkeley, Calif.	2	1	3	2.4	10.2
36. Reading, Pa.	2	0	1	2.7	10.5
37. San Jose, Calif.	**5**	**8**	**3**	**2.8**	**18.9**
38. Bridgeport, Conn.	3	2	0	2.9	10.6
39. Shreveport, La.	4	2	1	3.1	14.9
40. Dearborn, Mich.	4	4	10	3.1	18.5
41. Amarillo, Tex.	3	3	1	3.2	17.9
42. Lubbock, Tex.	**3**	**4**	**0**	**3.2**	**17.1**
43. Salt Lake City, Utah	7	4	3	3.3	21.9
44. Phoenix, Ariz.	7	6	6	3.3	26.3
45. Corpus Christi, Tex.	4	1	7	3.3	16.5
46. Tacoma, Wash.	5	3	4	3.4	19.0
47. Little Rock, Ark.	3	1	2	3.4	16.8
48. Pasadena, Calif.	4	4	4	3.5	21.0
49. Evansville, Ind.	4	2	1	3.7	14.2
50. Newport News, Va.	2	1	2	3.8	11.5
51. Sacramento, Calif.	8	4	4	4.3	30.5
52. Elizabeth, N. J.	3	1	3	4.6	15.3
53. Mobile, Ala.	6	4	6	5.2	20.7
54. Waco, Tex.	5	1	3	6.4	29.7
55. St. Petersburg, Fla.	12	7	2	6.8	54.2
Group VII (50,000 to 100,000)					
1. Topeka, Kan.	**0**	**2**	**3**	**0.0**	**0.0**
2. Fort Lauderdale, Fla.	**0**	**1**	**2**	**0.0**	**0.0**
3. Santa Ana, Calif.	**0**	**2**	**0**	**0.0**	**0.0**
4. Torrance, Calif.	**0**	**4**	**1**	**0.0**	**0.0**
5. Schenectady, N. Y.	0	0	1	0.0	0.0
6. Winston-Salem, N. C.	0	0	2	0.0	0.0
7. Pontiac, Mich.	0	0	3	0.0	0.0
8. Colorado Spgs., Colo.	0	0	0	0.0	0.0
9. Alexandria, Va.	**0**	**2**	**0**	**0.0**	**0.0**
10. W. Palm Beach, Fla.	**0**	**1**	**2**	**0.0**	**0.0**
11. Springfield, Ohio	**0**	**3**	**2**	**0.0**	**0.0**
12. Kalamazoo, Mich.	0	0	2	0.0	0.0
13. Wichita Falls, Tex.	0	0	0	0.0	0.0
14. Hamilton, Ohio	**0**	**2**	**1**	**0.0**	**0.0**
15. Cedar Rapids, Iowa	0	0	1	0.0	0.0
16. Columbus, Ga.	**0**	**1**	**0**	**0.0**	**0.0**
17. Binghamton, N. Y.	0	0	1	0.0	0.0
18. Newton, Mass.	0	0	0	0.0	0.0
19. Sioux City, Iowa	**0**	**8**	**1**	**0.0**	**0.0**
20. Joliet, Ill.	0	0	2	0.0	0.0
21. Warren, Ohio	**0**	**2**	**1**	**0.0**	**0.0**
22. Greenville, S. C.	0	0	1	0.0	0.0
23. Lexington, Ky.	**0**	**1**	**1**	**0.0**	**0.0**
24. Reno, Nev.	0	0	1	0.0	0.0
25. Johnstown, Pa.	0	0	1	0.0	0.0
26. Jackson, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
27. Bethlehem, Pa.	0	0	0	0.0	0.0
28. San Mateo, Calif.	0	0	1	0.0	0.0
29. Miami Beach, Fla.	**0**	**4**	**1**	**0.0**	**0.0**
30. Bay City, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
31. Asheville, N. C.	0	0	0	0.0	0.0
32. Berwyn, Ill.	0	0	2	0.0	0.0
33. Charleston, W. Va.	**0**	**1**	**1**	**0.0**	**0.0**
34. Lake Charles, La.	0	0	2	0.0	0.0
35. Battle Creek, Mich.	0	0	0	0.0	0.0
36. Evanston, Ill.	0	0	0	0.0	0.0
37. Anderson, Ind.	0	0	0	0.0	0.0
38. Mansfield, Ohio	0	0	1	0.0	0.0
39. St. Clair Shrs., Mich.	0	0	1	0.0	0.0
40. Lorain, Ohio	0	0	1	0.0	0.0
41. White Plains, N. Y.	0	0	0	0.0	0.0
42. Portland, Maine	**0**	**1**	**0**	**0.0**	**0.0**
43. Cambridge, Mass.	0	0	2	0.0	0.0
44. Pawtucket, R. I.	**0**	**1**	**0**	**0.0**	**0.0**
45. Alameda, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
46. Portsmouth, Va.	**0**	**2**	**0**	**0.0**	**0.0**
47. San Angelo, Tex.	**0**	**2**	**0**	**0.0**	**0.0**
48. Hampton, Va.	**0**	**3**	**4**	**0.0**	**0.0**
49. Waukegan, Ill.	0	0	1	0.0	0.0
50. Wheeling, W. Va.	0	0	3	0.0	0.0
51. Council Bluffs, Iowa	**0**	**1**	**2**	**0.0**	**0.0**
52. Elmira, N. Y.	0	0	0	0.0	0.0
53. Irvington, N. J.	0	0	0	0.0	0.0
54. Euclid, Ohio	0	0	1	0.0	0.0
55. Medford, Mass.	0	0	0	0.0	0.0
56. Cuyahoga Falls, Ohio	0	0	0	0.0	0.0
57. Bloomfield, N. J.	0	0	0	0.0	0.0
58. Passaic, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
59. West Hartford, Conn.	0	0	0	0.0	0.0
60. Atlantic City, N. J.	**0**	**1**	**2**	**0.0**	**0.0**
61. West Allis, Wis.	0	0	1	0.0	0.0
62. Brookline, Mass.	0	0	1	0.0	0.0
63. Greenwich, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
64. San Bernardino, Calif.	**1**	**5**	**3**	**1.0**	**7.2**
65. Stockton, Calif.	**1**	**3**	**2**	**1.1**	**7.9**
66. Beaumont, Tex.	**1**	**4**	**0**	**1.2**	**6.4**
67. Pueblo, Colo.	**1**	**2**	**0**	**1.3**	**7.3**
68. Decatur, Ill.	1	1	5	1.4	7.6
69. Las Vegas, Nev.	1	1	0	1.5	11.3
70. Abilene, Tex.	**1**	**2**	**1**	**1.6**	**9.9**
71. Racine, Wis.	1	0	0	1.6	7.3
72. Orlando, Fla.	2	0	0	1.6	13.4
73. Hayward, Calif.	1	1	0	1.6	10.9
74. Stamford, Conn.	1	0	2	1.6	6.9
75. Huntington, W. Va.	**1**	**3**	**2**	**1.7**	**6.9**
76. Raleigh, N. C.	1	0	0	1.7	8.5
77. San Leandro, Calif.	1	1	1	1.7	9.4
78. Davenport, Iowa	**1**	**2**	**0**	**1.7**	**7.4**
All cities in this group				1.7	8.0
79. Santa Monica, Calif.	1	0	0	1.8	7.9
80. Pomona, Calif.	**1**	**2**	**1**	**1.9**	**9.7**
81. Kenosha, Wis.	**1**	**3**	**0**	**1.9**	**9.2**
82. Muskegon, Mich.	1	0	0	2.0	10.5
83. Aurora, Ill.	1	0	1	2.0	10.4
84. Sioux Falls, S. D.	1	1	0	2.0	10.1
85. St. Joseph, Mo.	1	0	1	2.0	7.6
86. Mount Vernon, N. Y.	**1**	**2**	**0**	**2.1**	**7.9**
87. East Orange, N. J.	1	0	1	2.2	7.0
88. Tucson, Ariz.	**2**	**3**	**2**	**2.2**	**17.1**
89. Lakewood, Calif.	1	0	1	2.2	8.4
90. New Britain, Conn.	1	0	0	2.3	6.9
91. New Rochelle, N. Y.	1	1	1	2.3	8.1
92. Covington, Ky.	1	1	1	2.4	8.2
93. Columbia, S. C.	2	1	0	2.4	12.5
94. Fort Smith, Ark.	**1**	**2**	**0**	**2.5**	**10.0**
95. Oak Park, Ill.	1	0	1	2.6	9.8
96. Fullerton, Calif.	1	0	0	2.6	11.9
97. Springfield, Ill.	2	0	2	2.6	14.7
98. Riverside, Calif.	2	0	1	2.7	15.9
99. Bayonne, N. J.	1	1	1	2.7	7.8
100. Lynchburg, Va.	1	1	1	2.8	11.3
101. Tuscaloosa, Ala.	1	1	1	2.8	10.6
102. Lwr. Merion Twp., Pa.	1	1	1	3.0	10.4
103. Norwalk, Conn.	**1**	**2**	**0**	**3.0**	**9.8**
104. Pittsfield, Mass.	1	0	1	3.0	10.8
105. Parma, Ohio	1	0	0	3.0	8.2
106. Lincoln Park, Mich.	1	0	2	3.0	11.1
107. Waltham, Mass.	1	0	0	3.2	12.0
108. Meriden, Conn.	1	1	1	3.2	11.7
109. Pensacola, Fla.	2	1	1	3.3	23.5
110. Muncie, Ind.	2	0	2	3.3	18.4
111. Terre Haute, Ind.	2	0	0	3.3	16.5

	Two Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
112. Durham, N. C.	2	1	1	3.4	16.8
113. Woonsocket, R. I.	1	0	0	3.4	12.0
114. Wilkes-Barre, Pa.	2	0	3	3.5	15.6
115. Lancaster, Pa.	2	2	0	3.5	17.8
116. Warren, Mich.	2	3	2	3.6	18.9
117. Waterloo, Iowa	2	0	4	3.6	17.2
118. Burbank, Calif.	3	4	2	3.7	19.8
119. Manchester, N. H.	2	0	0	4.0	13.7
120. Ann Arbor, Mich.	2	0	1	4.2	22.0
121. Royal Oak, Mich.	3	2	1	4.7	25.2
122. Santa Barbara, Calif.	3	1	0	4.8	32.3
123. Anaheim, Calif.	4	7	0	4.9	30.6
124. Lakewood, Ohio	2	0	0	4.9	17.0
125. Macon, Ga.	4	3	0	5.3	34.1
126. Dubuque, Iowa	2	0	0	5.5	23.4
127. Springfield, Mo.	4	1	0	5.7	30.1
128. Greensboro, N. C.	4	2	3	6.0	29.5
129. Ogden, Utah	4	0	1	6.4	36.8
130. Gadsden, Ala.	2	1	1	6.5	18.7
131. Augusta, Ga.	4	1	0	6.9	32.2
132. Compton, Calif.	4	4	2	6.9	37.7
133. Brockton, Mass.	3	1	3	7.6	28.7
134. Charleston, S. C.	3	0	2	8.8	25.6
135. East Chicago, Ind.	3	0	2	10.4	30.2

Group VIII (25,000 to 50,000)

1. Eugene, Ore.	0	1	1	0.0	0.0
2. Tyler, Tex.	0	0	0	0.0	0.0
3. Odessa, Tex.	0	2	0	0.0	0.0
4. Yakima, Wash.	0	0	0	0.0	0.0
5. Wyandotte, Mich.	0	0	1	0.0	0.0
6. Great Falls, Mont.	0	0	1	0.0	0.0
7. Modesto, Calif.	0	0	3	0.0	0.0
8. Poughkeepsie, N. Y.	0	1	1	0.0	0.0
9. Cheyenne, Wyo.	0	0	0	0.0	0.0
10. Casper, Wyo.	0	0	0	0.0	0.0
11. Kokomo, Ind.	0	0	0	0.0	0.0
12. Whittier, Calif.	0	0	0	0.0	0.0
13. Everett, Wash.	0	1	0	0.0	0.0
14. Pasadena, Tex.	0	0	1	0.0	0.0
15. Plainfield, N. J.	0	0	0	0.0	0.0
16. Lafayette, Ind.	0	1	0	0.0	0.0
17. Beverly Hills, Calif.	0	2	1	0.0	0.0
18. Appleton, Wis.	0	1	0	0.0	0.0
19. Wilmington, N. C.	0	2	0	0.0	0.0
20. Hutchinson, Kan.	0	0	0	0.0	0.0
21. Salina, Kan.	0	0	0	0.0	0.0
22. Owensboro, Ky.	0	0	1	0.0	0.0
23. Newark, Ohio	0	0	2	0.0	0.0
24. Quincy, Ill.	0	2	2	0.0	0.0
25. Daytona Beach, Fla.	0	1	2	0.0	0.0
26. Elyria, Ohio	0	0	0	0.0	0.0
27. Rock Island, Ill.	0	0	0	0.0	0.0
28. La Crosse, Wis.	0	1	0	0.0	0.0
29. Lawton, Okla.	0	1	0	0.0	0.0
30. Easton, Pa.	0	0	0	0.0	0.0
31. Richmond, Ind.	0	0	1	0.0	0.0
32. Zanesville, Ohio	0	1	0	0.0	0.0
33. Pine Bluff, Ark.	0	0	1	0.0	0.0
34. Oxnard, Calif.	0	1	1	0.0	0.0
35. Rochester, Minn.	0	0	1	0.0	0.0
36. West Covina, Calif.	0	0	1	0.0	0.0
37. Aurora, Colo.	0	0	1	0.0	0.0
38. Pocatello, Idaho	0	2	6	0.0	0.0
39. Champaign, Ill.	0	0	0	0.0	0.0
40. University City, Mo.	0	0	1	0.0	0.0
41. Oshkosh, Wis.	0	0	1	0.0	0.0
42. Highland Pk., Mich.	0	2	1	0.0	0.0
43. St. Louis Pk., Minn.	0	1	0	0.0	0.0
44. Eau Claire, Wis.	0	0	0	0.0	0.0
45. Stratford, Conn.	0	0	1	0.0	0.0
46. Coral Gables, Fla.	0	0	1	0.0	0.0
47. Marion, Ohio	0	0	0	0.0	0.0
48. Portsmouth, Ohio	0	0	0	0.0	0.0
49. Montebello, Calif.	0	0	1	0.0	0.0
50. Ventura, Calif.	0	1	1	0.0	0.0
51. Menlo Park, Calif.	0	0	0	0.0	0.0
52. Beloit, Wis.	0	0	0	0.0	0.0
53. Granite City, Ill.	0	1	0	0.0	0.0
54. Wyoming, Mich.	0	0	0	0.0	0.0
55. East Cleveland, Ohio	0	0	0	0.0	0.0
56. Chicopee, Mass.	0	2	0	0.0	0.0
57. East Hartford, Conn.	0	0	1	0.0	0.0
58. West Haven, Conn.	0	0	0	0.0	0.0
59. Wausau, Wis.	0	1	0	0.0	0.0
60. Galesburg, Ill.	0	0	0	0.0	0.0
61. Torrington, Conn.	0	0	0	0.0	0.0
62. Roseville, Mich.	0	1	0	0.0	0.0
63. Ferndale, Mich.	0	0	0	0.0	0.0
64. Sandusky, Ohio	0	0	0	0.0	0.0
65. Rome, Ga.	0	0	0	0.0	0.0
66. Janesville, Wis.	0	0	1	0.0	0.0
67. Fairfield, Conn.	0	4	1	0.0	0.0
68. Mountain View, Calif.	0	0	0	0.0	0.0
69. Jackson, Tenn.	0	0	0	0.0	0.0
70. Manhattan Bch., Calif.	0	0	0	0.0	0.0
71. Burlington, Iowa	0	0	1	0.0	0.0
72. South Euclid, Ohio	0	0	0	0.0	0.0
73. Findlay, Ohio	0	0	0	0.0	0.0
74. Chillicothe, Ohio	0	0	0	0.0	0.0
75. Fair Lawn, N. J.	0	0	1	0.0	0.0
76. Baldwin Park, Calif.	0	0	0	0.0	0.0
77. Rock Hill, S. C.	0	0	0	0.0	0.0
78. Fond du Lac, Wis.	0	0	1	0.0	0.0
79. Park Ridge, Ill.	0	0	0	0.0	0.0
80. Columbia, Mo.	0	1	0	0.0	0.0
81. National City, Calif.	0	0	0	0.0	0.0
82. Steubenville, Ohio	0	0	0	0.0	0.0
83. Oak Park, Mich.	0	0	0	0.0	0.0
84. Allen Park, Mich.	0	0	0	0.0	0.0
85. Fitchburg, Mass.	0	1	0	0.0	0.0
86. Kearny, N. J.	0	1	0	0.0	0.0
87. Manitowoc, Wis.	0	0	0	0.0	0.0
88. Lockport, N. Y.	0	0	1	0.0	0.0
89. Petersburg, Va.	0	0	1	0.0	0.0
90. Walla Walla, Wash.	0	0	1	0.0	0.0
91. Birmingham, Mich.	0	0	0	0.0	0.0
92. Bristol, Conn.	0	0	0	0.0	0.0
93. Minot, N. D.	0	1	0	0.0	0.0
94. Mt. Clemens, Mich.	0	0	0	0.0	0.0
95. Redlands, Calif.	0	0	0	0.0	0.0
96. Provo, Utah	0	0	0	0.0	0.0
97. Norman, Okla.	0	0	0	0.0	0.0
98. Kettering, Ohio	0	0	0	0.0	0.0
99. Middletown, Conn.	0	1	0	0.0	0.0
100. Burlington, Vt.	0	0	0	0.0	0.0
101. New Kensington, Pa.	0	0	0	0.0	0.0
102. Freeport, Ill.	0	0	0	0.0	0.0
103. Watertown, Mass.	0	0	0	0.0	0.0
104. Burlington, N. C.	0	0	0	0.0	0.0
105. Amsterdam, N. Y.	0	0	0	0.0	0.0
106. Webster Groves, Mo.	0	0	0	0.0	0.0
107. Grand Forks, N.D.	0	0	0	0.0	0.0
108. Lewiston, Maine	0	0	0	0.0	0.0
109. Fairmont, W. Va.	0	0	0	0.0	0.0
110. Shaker Heights, Ohio	0	0	1	0.0	0.0
111. Annapolis, Md.	0	1	0	0.0	0.0
112. Oak Ridge, Tenn.	0	1	1	0.0	0.0
113. Denton, Tex.	0	1	0	0.0	0.0
114. Wallingford, Conn.	0	2	0	0.0	0.0
115. Maple Heights, Ohio	0	0	0	0.0	0.0
116. Winona, Minn.	0	0	0	0.0	0.0
117. Highland Park, Ill.	0	1	0	0.0	0.0
118. East Lansing, Mich.	0	0	0	0.0	0.0
119. Park Forest, Ill.	0	0	0	0.0	0.0
120. Belmont, Mass.	0	0	0	0.0	0.0
121. Groton, Conn.	0	0	1	0.0	0.0
122. Lackawanna, N. Y.	0	0	1	0.0	0.0
All cities in this group				1.6	7.5
123. Palo Alto, Calif.	1	3	0	1.8	12.5
124. Billings, Mont.	1	0	0	2.0	15.6
125. Redwood City, Calif.	1	0	2	2.1	15.4
126. Vallejo, Calif.	1	0	0	2.1	13.6
127. Ontario, Calif.	1	0	0	2.2	14.4
128. Vancouver, Wash.	1	0	0	2.2	14.3
129. Boise, Idaho	1	0	0	2.4	17.4
130. Elgin, Ill.	1	2	0	2.6	12.4
131. Elkhart, Ind.	1	0	0	2.7	15.5
132. High Point, N. C.	1	0	1	2.8	13.6
133. Warwick, R. I.	1	0	3	2.8	14.0
134. Middletown, Ohio	1	1	1	2.8	13.5
135. Spartanburg, S. C.	1	2	0	2.8	14.4
136. Rapid City, S. D.	1	1	1	2.9	15.0
137. Moline, Ill.	1	1	1	3.0	15.3
138. Enid, Okla.	1	1	0	3.0	16.1
139. Danbury, Conn.	1	0	0	3.0	14.1
140. Wauwatosa, Wis.	1	0	0	3.1	13.0
141. Gainesville, Fla.	1	0	0	3.1	19.2
142. Muskogee, Okla.	1	0	0	3.2	16.1
143. Newburgh, N. Y.	1	0	0	3.2	18.5
144. Sheboygan, Wis.	1	0	0	3.2	12.6
145. Fargo, N. D.	1	0	1	3.2	14.6
146. Arlington, Mass.	1	1	0	3.4	12.7
147. Alton, Ill.	1	3	0	3.4	18.4
148. Elmhurst, Ill.	1	0	1	3.4	17.3
149. Rome, N. Y.	1	0	0	3.5	12.5
150. Des Plaines, Ill.	1	0	0	3.5	19.5
151. Bloomington, Ind.	1	0	0	3.5	19.9
152. Barberton, Ohio	1	0	4	3.6	16.7
153. Linden, N. J.	1	0	1	3.6	16.4
154. Chicago Heights, Ill.	1	0	0	3.7	20.8
155. West Orange, N. J.	1	0	1	3.7	17.5
156. Bloomington, Ill.	1	0	0	3.8	16.6
157. Westfield, N. J.	1	0	1	3.9	23.2
158. Manchester, Conn.	1	0	0	4.0	15.1
159. Monroe, Mich.	1	0	0	4.0	21.4
160. Bangor, Maine	1	0	0	4.2	15.0
161. Hackensack, N. J.	1	1	1	4.2	18.7
162. Richfield, Minn.	1	0	1	4.2	17.0
163. Hamtramck, Mich.	1	0	1	4.3	13.1
164. Teaneck, N. J.	1	1	1	4.3	15.7
165. Tallahassee, Fla.	2	0	0	4.4	31.5
166. Benton Harbor, Mich.	1	1	0	4.4	23.5
167. Iowa City, Iowa	1	0	0	4.5	22.1
168. Rahway, N. J.	1	0	1	4.5	22.3
169. Sumter, S. C.	1	0	1	4.7	23.8
170. Garfield Hghts., Ohio	1	1	0	4.7	17.0
171. Parkersburg, W. Va.	1	0	0	4.8	19.2
172. Concord, N. H.	1	0	0	4.9	20.1
173. Hamden, Conn.	1	0	0	5.1	15.7
174. Superior, Wis.	1	1	0	5.1	17.0
175. Urbana, Ill.	1	0	0	5.5	22.9
176. Santa Clara, Calif.	2	2	1	5.6	27.7
177. Southfield, Mich.	1	0	0	5.6	22.5
178. Hazel Park, Mich.	1	0	1	5.7	22.6
179. Hagerstown, Md.	2	1	1	5.9	31.2
180. Bellingham, Wash.	2	0	1	6.4	32.8
181. Danville, Va.	2	0	0	6.4	24.1
182. East Detroit, Mich.	2	0	0	6.7	27.9
183. Vineland, N. J.	2	2	1	7.0	36.4
184. Michigan City, Ind.	2	0	0	7.3	36.3
185. Norwich, Conn.	2	0	0	7.5	30.8
186. Milford, Conn.	2	0	0	8.0	30.6
187. St. Cloud, Minn.	2	0	0	8.5	37.2
188. New London, Conn.	2	0	0	9.2	38.5
189. Temple, Tex.	2	0	0	9.3	39.9
190. Revere, Mass.	2	1	2	11.0	30.3
191. Mishawaka, Ind.	4	0	0	14.4	70.4

Group IX (10,000 to 25,000)

1. Boulder, Colo.	0	0	0	0.0	0.0
2. Englewood, Colo.	0	0	0	0.0	0.0
3. Mesa, Ariz.	0	2	0	0.0	0.0
4. Greeley, Colo.	0	0	0	0.0	0.0
5. Santa Cruz, Calif.	0	0	1	0.0	0.0
6. La Mesa, Calif.	0	0	0	0.0	0.0
7. Ft. Pierce, Fla.	0	4	1	0.0	0.0
8. Grand Island, Neb.	0	0	1	0.0	0.0
9. Fort Myers, Fla.	0	0	0	0.0	0.0
10. Austin, Minn.	0	0	0	0.0	0.0
11. Garland, Tex.	0	0	1	0.0	0.0
12. Orange, Calif.	0	0	0	0.0	0.0
13. Merced, Calif.	0	0	1	0.0	0.0
14. Los Altos, Calif.	0	1	0	0.0	0.0
15. Edina, Minn.	0	0	0	0.0	0.0
16. Lawrence, Kan.	0	0	0	0.0	0.0
17. Longview, Wash.	0	0	0	0.0	0.0
18. Lodi, Calif.	0	0	1	0.0	0.0
19. Waukesha, Wis.	0	2	0	0.0	0.0
20. Port Chester, N. Y.	0	0	0	0.0	0.0
21. Big Spring, Tex.	0	2	0	0.0	0.0
22. La Porte, Ind.	0	0	0	0.0	0.0
23. Bartlesville, Okla.	0	0	0	0.0	0.0
24. Bismarck, N. D.	0	0	0	0.0	0.0
25. Carlsbad, N. M.	0	0	0	0.0	0.0
26. Klamath Falls, Ore.	0	0	0	0.0	0.0
27. Lake Worth, Fla.	0	0	0	0.0	0.0
28. Sherman, Tex.	0	1	0	0.0	0.0
29. Butler, Pa.	0	0	0	0.0	0.0
30. Pampa, Tex.	0	0	0	0.0	0.0
31. Endicott, N. Y.	0	0	1	0.0	0.0
32. Ypsilanti, Mich.	0	0	0	0.0	0.0
33. Ames, Iowa	0	0	1	0.0	0.0
34. Frederick, Md.	0	0	0	0.0	0.0
35. El Cerrito, Calif.	0	0	1	0.0	0.0
36. Ocala, Fla.	0	0	0	0.0	0.0
37. Napa, Calif.	0	0	0	0.0	0.0
38. San Fernando, Calif.	0	0	0	0.0	0.0
39. North Miami, Fla.	0	0	0	0.0	0.0
40. Covina, Calif.	0	0	0	0.0	0.0
41. Great Bend, Kan.	0	0	0	0.0	0.0
42. East Haven, Conn.	0	0	0	0.0	0.0
43. Lombard, Ill.	0	0	0	0.0	0.0
44. Lufkin, Tex.	0	0	0	0.0	0.0
45. Corvallis, Ore.	0	0	0	0.0	0.0
46. Manhattan, Kan.	0	0	0	0.0	0.0
47. Tiffin, Ohio	0	0	0	0.0	0.0
48. Wheaton, Ill.	0	0	0	0.0	0.0
49. Renton, Wash.	0	0	1	0.0	0.0
50. Uniontown, Pa.	0	0	0	0.0	0.0
51. Wilmette, Ill.	0	0	0	0.0	0.0
52. Ottawa, Ill.	0	0	0	0.0	0.0
53. Jeffersonville, Ind.	0	0	0	0.0	0.0
54. North Platte, Neb.	0	0	0	0.0	0.0
55. Madison Hgts., Mich.	0	0	0	0.0	0.0
56. Newport, R. I.	0	0	0	0.0	0.0
57. Fremont, Ohio	0	0	0	0.0	0.0
58. Wayne, Mich.	0	0	0	0.0	0.0
59. Aberdeen, S. D.	0	0	0	0.0	0.0
60. Monterey, Calif.	0	0	1	0.0	0.0
61. Denison, Tex.	0	1	0	0.0	0.0
62. Cranford, N. J.	0	0	0	0.0	0.0
63. Plainview, Tex.	0	0	0	0.0	0.0
64. Robbinsdale, Minn.	0	0	1	0.0	0.0
65. Holland, Mich.	0	0	0	0.0	0.0
66. Salisbury, N. C.	0	0	1	0.0	0.0
67. Brownwood, Tex.	0	0	0	0.0	0.0
68. Pittsburg, Kan.	0	0	0	0.0	0.0
69. Muscatine, Iowa	0	0	0	0.0	0.0
70. Traverse City, Mich.	0	0	0	0.0	0.0
71. Westport, Conn.	0	0	0	0.0	0.0
72. Newport Bch., Calif.	0	2	0	0.0	0.0
73. Muskegon Hts., Mich.	0	0	0	0.0	0.0
74. Floral Park, N. Y.	0	0	0	0.0	0.0
75. Ada, Okla.	0	0	0	0.0	0.0
76. South St. Paul, Minn.	0	0	0	0.0	0.0
77. Texarkana, Ark.	0	1	0	0.0	0.0
78. Hibbing, Minn.	0	0	0	0.0	0.0
79. Yuma, Ariz.	0	0	0	0.0	0.0

	Two Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
80. Cape Girardeau, Mo.	0	0	0	0.0	0.0
81. So. Portland, Maine	0	0	0	0.0	0.0
82. Oceanside, Calif.	**0**	**1**	**1**	**0.0**	**0.0**
83. Richland, Wash.	0	0	0	0.0	0.0
84. Cedar Falls, Iowa	0	0	0	0.0	0.0
85. Emporia, Kan.	0	0	0	0.0	0.0
86. Meadville, Pa.	0	0	0	0.0	0.0
87. Coffeyville, Kan.	0	0	0	0.0	0.0
88. Niles, Mich.	0	0	0	0.0	0.0
89. Marietta, Ohio	0	0	0	0.0	0.0
90. Albert Lea, Minn.	0	0	0	0.0	0.0
91. Calumet City, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
92. Augusta, Maine	0	0	2	0.0	0.0
93. Hillside, N. J.	0	0	0	0.0	0.0
94. Johnson City, N. Y.	0	0	0	0.0	0.0
95. Berkley, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
96. Moorhead, Minn.	**0**	**1**	**1**	**0.0**	**0.0**
97. Fairborn, Ohio	0	0	0	0.0	0.0
98. Xenia, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
99. Streator, Ill.	0	0	0	0.0	0.0
100. Connersville, Ind.	**0**	**1**	**0**	**0.0**	**0.0**
101. Huntington, Ind.	0	0	0	0.0	0.0
102. Snyder, Tex.	0	0	0	0.0	0.0
103. Stillwater, Okla.	0	0	1	0.0	0.0
104. Las Cruces, N. M.	0	0	1	0.0	0.0
105. Martinsville, Va.	**0**	**2**	**0**	**0.0**	**0.0**
106. Elmwood Park, Ill.	0	0	0	0.0	0.0
107. Oswego, N. Y.	0	0	0	0.0	0.0
108. Shorewood, Wis.	0	0	0	0.0	0.0
109. Pittsburg, Calif.	0	0	0	0.0	0.0
110. Ashland, Ohio	0	0	0	0.0	0.0
111. Greensburg, Pa.	0	0	0	0.0	0.0
112. New Bern, N. C.	0	0	0	0.0	0.0
113. Mt. Vernon, Ill.	0	0	0	0.0	0.0
114. So. Milwaukee, Wis.	0	0	0	0.0	0.0
115. Statesville, N. C.	0	0	0	0.0	0.0
116. Tempe, Ariz.	**0**	**2**	**0**	**0.0**	**0.0**
117. Valparaiso, Ind.	0	0	0	0.0	0.0
118. El Dorado, Kan.	0	0	0	0.0	0.0
119. Peru, Ind.	0	0	0	0.0	0.0
120. Brainerd, Minn.	0	1	0	0.0	0.0
121. Woodland, Calif.	0	0	0	0.0	0.0
122. Arkansas City, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
123. Pendleton, Ore.	0	0	0	0.0	0.0
124. Escondido, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
125. Sterling, Ill.	0	0	0	0.0	0.0
126. Evergreen Park, Ill.	0	0	0	0.0	0.0
127. Marquette, Mich.	0	0	0	0.0	0.0
128. Villa Park, Ill.	0	0	0	0.0	0.0
129. Fostoria, Ohio	0	0	0	0.0	0.0
130. Stevens Point, Wis.	0	0	0	0.0	0.0
131. Redding, Calif.	0	0	0	0.0	0.0
132. La Grange, Ill.	0	0	0	0.0	0.0
133. Takoma Park, Md.	0	0	0	0.0	0.0
134. Niles, Ohio	0	0	0	0.0	0.0
135. Defiance, Ohio	0	0	0	0.0	0.0
136. McAlester, Okla.	**0**	**1**	**0**	**0.0**	**0.0**
137. Alpena, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
138. De Kalb, Ill.	0	0	0	0.0	0.0
139. Massena, N. Y.	0	0	0	0.0	0.0
140. East Moline, Ill.	0	0	0	0.0	0.0
141. Brookfield, Ill.	0	0	0	0.0	0.0
142. Goshen, Ind.	**0**	**1**	**0**	**0.0**	**0.0**
143. Bristol, Va.	0	0	0	0.0	0.0
144. Naugatuck, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
145. Tracy, Calif.	0	0	0	0.0	0.0
146. Attleboro, Mass.	**0**	**2**	**0**	**0.0**	**0.0**
147. Owatonna, Minn.	0	0	0	0.0	0.0
148. Highland Park, Tex.	0	0	0	0.0	0.0
149. Pompano Beach, Fla.	0	0	0	0.0	0.0
150. Norfolk, Neb.	0	0	0	0.0	0.0
151. Wethersfield, Conn.	0	0	0	0.0	0.0
152. Prescott, Ariz.	0	0	0	0.0	0.0
153. Wisconsin Rpds., Wis.	0	0	0	0.0	0.0
154. Faribault, Minn.	0	0	0	0.0	0.0
155. Rocky River, Ohio	0	0	0	0.0	0.0
156. Glenview, Ill.	0	0	1	0.0	0.0
157. Yuba City, Calif.	0	0	0	0.0	0.0
158. Needham, Mass.	**0**	**1**	**0**	**0.0**	**0.0**
159. The Dalles, Ore.	0	0	0	0.0	0.0
160. Port Angeles, Wash.	0	0	0	0.0	0.0
161. Garden City, Kan.	0	0	0	0.0	0.0
162. Shelton, Conn.	0	0	4	0.0	0.0
163. Vernon, Conn.	0	0	0	0.0	0.0
164. Hanford, Calif.	0	0	0	0.0	0.0
165. Boone, Iowa	0	0	0	0.0	0.0
166. Sault Ste. Marie, Mich.	0	0	0	0.0	0.0
167. Fergus Falls, Minn.	0	0	0	0.0	0.0
168. North Adams, Mass.	**0**	**1**	**0**	**0.0**	**0.0**
169. South Orange, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
170. Logan, Utah	0	0	0	0.0	0.0
171. Astoria, Ore.	0	0	0	0.0	0.0
172. Winfield, Kan.	0	0	0	0.0	0.0
173. Branford, Conn.	0	0	0	0.0	0.0
174. Kenmore, N. Y.	0	0	0	0.0	0.0
175. State College, Pa.	0	0	0	0.0	0.0
176. Mamaroneck, N. Y.	**0**	**1**	**0**	**0.0**	**0.0**
177. Waynesboro, Va.	0	0	0	0.0	0.0
178. Hawthorne, N. J.	0	0	0	0.0	0.0
179. Griffin, Ga.	0	0	0	0.0	0.0
180. Ansonia, Conn.	0	0	0	0.0	0.0
181. Lexington, N. C.	0	0	0	0.0	0.0
182. Moses Lake, Wash.	0	0	1	0.0	0.0
183. Marshfield, Wis.	0	0	0	0.0	0.0
184. Albany, Calif.	0	0	0	0.0	0.0
185. St. Joseph, Mich.	0	0	0	0.0	0.0
186. Lamesa, Tex.	0	0	0	0.0	0.0
187. Escanaba, Mich.	0	0	0	0.0	0.0
188. Jennings, Mo.	0	0	0	0.0	0.0
189. Enfield, Conn.	0	0	0	0.0	0.0
190. Brawley, Calif.	0	0	1	0.0	0.0
191. Gardner, Mass.	0	0	1	0.0	0.0
192. Canton, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
193. Martinsburg, W. Va.	0	0	0	0.0	0.0
194. Mitchell, S. D.	0	0	0	0.0	0.0
195. Beaver Dam, Wis.	0	0	0	0.0	0.0
196. Hopewell, Va.	0	0	0	0.0	0.0
197. Conneaut, Ohio	0	0	0	0.0	0.0
198. Winnetka, Ill.	0	0	0	0.0	0.0
199. Hays, Kan.	0	0	0	0.0	0.0
200. Menasha, Wis.	0	0	0	0.0	0.0
201. Plymouth, Mich.	0	0	0	0.0	0.0
202. North Olmsted, Ohio	0	0	1	0.0	0.0

TRAFFIC DEATHS—STATE RECORDS

Deaths are reported by state traffic authorities.

All figures are preliminary. To insure proper comparisons, 1959 and 1958 figures cover the same reporting period as those for 1960.

Population Rate: U. S. population rate is the estimated annual number of deaths per 100,000 population, assuming that deaths for the rest of the year will follow the normal seasonal pattern. State population rate is the estimated annual number of deaths per 100,000 population, assuming that the monthly average of deaths will remain at the present average for the rest of the year. Population rates are based on July 1, 1959, population estimates, U. S. Bureau of the Census, Washington, D. C.

States shown in heavy type have improved in 1960 compared with 1959, or showed no change.

	Months Reported	Deaths Identical Periods 1960	1959	1958	% Changes 1959 to 1960	1958 to 1960	1960 Pop. Rate	1960 Mile. Rate
TOTAL U.S.	2	5,240	5,180	5,107	+ 1%	+ 3%	21.2	—
Ala.	2	91	116	111	— 22%	— 18%	17.1	—
Alaska	2	1	3	4	— 67%	— 75%	3.1	—
Ariz.	2	66	78	80	— 15%	— 18%	32.1	—
Ark.	2	57	50	55	+ 14%	+ 4%	19.6	—
Calif.	2	514	532	509	— 3%	+ 1%	21.1	—
Colo.	2	53	41	38	+ 29%	+ 39%	18.9	—
Conn.	2	32	41	27	— 22%	+ 19%	8.0	—
Del.	2	13	9	7	+ 44%	+ 86%	17.2	—
D. of C.	2	17	10	5	+ 70%	+240%	12.1	—
Fla.	2	205	207	193	— 1%	+ 6%	25.8	—
Ga.	2	155	135	122	+ 15%	+ 27%	24.2	—
Hawaii	2	14	17	—	— 18%	—	12.8	—
Idaho	2	19	36	28	— 47%	— 32%	17.2	—
Ill.	2	211	212	229	— *%	— 8%	12.4	—
Ind.	2	153	142	130	+ 8%	+ 18%	19.8	—
Ia.	2	69	97	101	— 29%	— 32%	14.7	—
Kan.	2	54	70	61	— 23%	— 11%	15.1	—
Ky.	2	114	95	130	+ 20%	— 12%	21.9	—
La.	2	117	105	144	+ 11%	— 19%	22.2	—
Maine	2	20	25	17	— 20%	+ 18%	12.6	—
Md.	2	90	77	74	+ 17%	+ 22%	17.8	—
Mass.	2	73	79	82	— 8%	— 11%	8.8	—
Mich.	2	193	130	168	+ 48%	+ 15%	14.5	—
Minn.	2	89	94	80	— 5%	+ 11%	15.7	—
Miss.	2	95	83	54	+ 14%	+ 76%	26.1	—
Mo.	2	163	114	98	+ 43%	+ 68%	23.0	—
Mont.	2	23	20	28	+ 15%	— 18%	20.1	—
Neb.	2	32	40	36	— 20%	— 11%	13.2	—
Nev.	2	17	15	14	+ 13%	+ 21%	36.4	—
N. H.	2	8	13	3	— 38%	+167%	8.1	—
N. J.	2	124	108	113	+ 15%	+ 10%	12.5	—
N. M.	2	54	62	54	— 13%	0%	36.9	—
N. Y.	2	274	303	306	— 10%	— 10%	10.0	—
N. C.	2	156	181	128	— 14%	+ 22%	20.7	—
N. D.	2	12	19	13	— 37%	— 8%	11.2	—
Ohio	2	249	203	272	+ 23%	— 8%	15.4	—
Okla.	2	78	79	88	— 1%	— 11%	20.6	—
Ore.	2	52	60	56	— 13%	— 7%	17.7	—
Pa.	2	230	238	223	— 3%	+ 3%	12.3	—
R. I.	2	7	8	10	— 13%	— 30%	4.8	—
S. C.	2	119	84	84	+ 42%	+ 42%	29.5	—
S. D.	2	23	26	36	— 12%	— 36%	20.1	—
Tenn.	2	112	82	90	+ 37%	+ 24%	19.2	—
Tex.	2	276	366	316	— 25%	— 13%	17.4	—
Utah	2	33	19	18	+ 74%	+ 83%	22.5	—
Vt.	2	11	14	5	— 21%	+120%	17.7	—
Va.	2	102	113	112	— 10%	— 9%	15.3	—
Wash.	2	78	63	82	+ 24%	— 5%	16.6	—
W. Va.	2	42	56	50	— 25%	— 16%	12.8	—
Wis.	2	103	101	91	+ 2%	+ 13%	15.4	—
Wyo.	2	11	17	17	— 35%	— 35%	20.7	—
P. R.‡	2	48	39	44	+ 23%	+ 9%	12.4	—
V. I.†	2	1	0	1	††	0%	22.2	—
CANADIAN PROVINCES								
Alta.	1	15	7	17	+114%	— 12%	15.5	—
B. C.	1	22	14	21	+ 57%	+ 5%	17.8	—
Man.	1	3	5	6	— 40%	— 50%	4.2	—
Sask.	1	5	2	8	+150%	— 38%	6.8	—

*Less than .5%
‡Commonwealth of Puerto Rico
†Virgin Islands
††Percentage change cannot be computed because 1959 total was zero.

	Two Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
203. Seaside, Calif.	0	0	0	0.0	0.0
204. Albion, Mich.	0	0	0	0.0	0.0
205. Van Wert, Ohio	0	0	0	0.0	0.0
206. Bellefontaine, Ohio	0	0	0	0.0	0.0
207. Elizabeth City, N. C.	0	0	0	0.0	0.0
208. Bowling Green, Ohio	0	0	0	0.0	0.0
209. Suffolk, Va.	0	0	0	0.0	0.0
210. Windsor, Conn.	0	0	0	0.0	0.0
211. Hornell, N. Y.	0	0	0	0.0	0.0
212. Virginia, Minn.	0	0	0	0.0	0.0
213. Grosse Pt. Wds., Mich.	0	0	0	0.0	0.0
214. Du Bois, Pa.	**0**	**1**	**0**	**0.0**	**0.0**
215. Marinette, Wis.	**0**	**1**	**1**	**0.0**	**0.0**
216. Winchester, Conn.	0	0	0	0.0	0.0
217. Red Wing, Minn.	0	0	0	0.0	0.0
218. Bay Village, Ohio	0	0	0	0.0	0.0
219. River Forest, Ill.	0	0	0	0.0	0.0
220. Circleville, Ohio	0	0	0	0.0	0.0
221. Cudahy, Wis.	0	0	0	0.0	0.0
222. Homewood, Ala.	**0**	**1**	**0**	**0.0**	**0.0**
223. Pacific Grove, Calif.	0	0	0	0.0	0.0
224. Cadillac, Mich.	0	0	0	0.0	0.0
225. University Hts., Ohio	0	0	0	0.0	0.0
226. Rock Springs, Wyo.	0	0	0	0.0	0.0
227. Cambridge, Md.	0	0	0	0.0	0.0
228. La Grange Park, Ill.	0	0	0	0.0	0.0
229. Fairfield, Calif.	0	0	0	0.0	0.0
230. Windham, Conn.	0	0	0	0.0	0.0
231. Menominee, Mich.	0	0	0	0.0	0.0
232. Bemidji, Minn.	0	0	0	0.0	0.0
233. Grosse Pte. Pk., Mich.	0	0	0	0.0	0.0
234. Two Rivers, Wis.	0	0	0	0.0	0.0
235. Henderson, N. C.	0	0	1	0.0	0.0
236. Covington, Va.	0	0	0	0.0	0.0
237. Huntington Bch., Calif.	**0**	**6**	**1**	**0.0**	**0.0**
238. Dyersburg, Tenn.	**0**	**2**	**0**	**0.0**	**0.0**
239. Ecorse, Mich.	0	0	0	0.0	0.0
240. Maumee, Ohio	0	0	0	0.0	0.0
241. Fort Thomas, Ky.	0	0	0	0.0	0.0
242. Stoughton, Mass.	0	0	0	0.0	0.0
243. Los Alamos, N. M.	**0**	**1**	**0**	**0.0**	**0.0**
244. Moscow, Idaho	0	0	0	0.0	0.0
245. Westlake, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
246. Monroe, N. C.	0	0	1	0.0	0.0
247. Mansfield, Conn.	0	0	0	0.0	0.0
248. Bellaire, Ohio	0	0	0	0.0	0.0
249. Auburn, Mass.	0	0	0	0.0	0.0
250. Stonington, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
251. Ridgefield Park, N. J.	0	0	0	0.0	0.0
252. Webster, Mass.	0	0	0	0.0	0.0
253. Beacon, N. Y.	0	0	1	0.0	0.0
254. Ashland, Wis.	0	0	0	0.0	0.0
255. Fairfield, Ala.	0	0	0	0.0	0.0
256. Watertown, Conn.	0	0	0	0.0	0.0
257. Killingly, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
258. Donora, Pa.	0	0	0	0.0	0.0
259. Rolling Meadows, Ill.	0	0	0	0.0	00.
All cities in this group				1.0	5.4
260. Ponca City, Okla.	1	0	0	4.2	26.0
261. Kingsport, Tenn.	1	0	0	5.1	24.5
262. Kingston, N. C.	1	0	0	5.4	26.5
263. W. Springfield, Mass.	1	0	0	5.5	26.2
264. Borger, Tex.	**1**	**2**	**0**	**5.6**	**33.1**
265. Owosso, Mich.	1	0	0	5.7	30.2
266. Sedalia, Mo.	1	0	0	5.7	28.3
267. Morristown, N. J.	1	0	0	5.7	33.9
268. Colton, Calif.	1	0	0	6.0	31.7
269. Hollywood, Fla.	2	1	1	6.3	52.6
270. Caldwell, Idaho	1	1	0	6.8	51.3
271. Newton, Kan.	1	0	0	7.1	45.5
272. Greenwood, Miss.	1	1	0	7.1	31.1
273. Collingswood, N. J.	1	1	0	7.2	33.3
274. Corona, Calif.	1	1	0	7.2	47.2
275. Darien, Conn.	1	1	0	7.6	38.2
276. Livermore, Calif.	1	0	0	7.6	47.6
277. Watertown, Wis.	1	0	0	8.2	46.2
278. Rye, N. Y.	1	0	0	8.4	43.2
279. Victoria, Tex.	2	0	0	8.4	53.6
280. Atchison, Kan.	1	0	1	8.8	46.9
281. Bell, Calif.	2	0	0	9.6	65.2
282. Southington, Conn.	1	0	1	9.7	35.5
283. Dover, Ohio	1	0	0	10.1	55.6
284. River Rouge, Mich.	1	1	0	10.4	28.2
285. North Chicago, Ill.	1	0	0	11.3	33.3
286. Milford, Mass.	1	1	0	11.6	38.5
287. West Lafayette, Ind.	**1**	**3**	**0**	**11.6**	**45.8**
288. Derby, Conn.	1	0	0	12.5	54.1
289. La Salle, Ill.	1	0	0	12.5	49.6
290. Wooster, Ohio	2	1	0	12.8	70.6
291. Leominster, Mass.	2	0	1	13.1	48.4
292. Bloomington, Minn.	3	0	0	22.3	142.9
293. Reidsville, N. C.	4	0	0	41.9	205.1
CANADIAN CITIES					
London, Ont.	0	0	2	—	0.0
Montreal, Que.	10	7	17	—	5.4
Toronto, Ont.	19	15	29	—	7.7
Hamilton, Ont.	5	5	3	—	12.4

MOTOR VEHICLE DEATHS AND INJURIES BY STATES 1960 and 1959

Eighteen states and the District of Columbia have reported their death and injury experience for the first month of 1960.

The table below shows all of the injury data reported by each state, but little information is available on precisely what injuries are included in each state's tabulation.

Differences in the ratio of injuries to deaths probably reflect primarily differences in the extent to which all injuries are reported. Other factors are undoubtedly involved, such as: (1) a few states omit some or all of the injuries in urban accidents; (2) there are large differences between states in the proportion of travel which is in urban area (the injury-death ratio for urban accidents is about four times the ratio for rural accidents).

The question of what injuries are being reported applies with equal force to the per cent change in injuries from 1959 to 1960. Any tightening up of police administration, any emphasis on "get all the injuries" is almost certain to bring about an increase in reported injuries, but probably only in minor ones. Similarly, instructions to "skip the scratches" probably would result in a decrease in recorded cases in many states. Introduction of financial responsibility laws has been observed to increase reported injuries sharply. Even the public's increased claims-consciousness is regarded by many people as an element in the growing number of injuries reported. With such factors operating to destroy comparability, indicated changes in the number of injuries should not be considered as reliable.

	Months Reported	Deaths†† 1960	Deaths†† 1959	Injuries†† 1960	Injuries†† 1959	% Change 1959 to 1960 Deaths	% Change 1959 to 1960 Injuries	1960 Ratio of Injuries to Deaths
TOTAL U.S.	**	1,205#	1,142#	36,835	36,250	+ 6#	+ 2	31
Ala.	1	47	54	361†	393†	— 13	— 8	8
Ariz.								
Ark.	1	24	35	251	199	— 31	+ 26	10
Calif.	1	282	280	11,582	11,113	+ 1	+ 4	41
Colo.								
Conn.								
Del.	1	10	4	194	183	+150	+ 6	19
D. of C.	1	10	8	648	504	+ 25	+ 29	65
Fla.	1	119	116	3,915	3,942	+ 3	— 1	33
Ga.	1	87	78	1,356	1,336	+ 12	+ 1	16
Idaho								
Ill.								
Ind.								
Iowa								
Kan.								
Ky.	1	64	47	1,098	1,130	+ 36	— 3	17
La.								
Maine	1	12	13	484	473	— 8	+ 2	40
Md.								
Mass.								
Mich.	1	128	66	6,104	4,353	+ 94	+ 40	48
Minn.	1	48	49	1,062***	2,029***	— 2	— 48	22
Miss.								
Mo.	1	89	67	913	750	+ 33	+ 22	10
Mont.								
Neb.								
Nev.								
N. H.	1	6	7	554	566	— 14	— 2	92
N. J.								
N. M.								
N. Y.								
N. C.								
N. D.								
Ohio								
Okla.	1	41	41	1,309	1,190	0	+ 10	32
Ore.	1	26	31	1,237	1,255	— 16	— 1	48
Pa.								
R. I.								
S. C.	1	66	51	874	897	+ 29	— 3	13
S. D.								
Tenn.								
Tex.	1	129	177	4,537	5,529	— 27	— 18	35
Utah								
Vt.	1	8	8	188	243	0	— 23	24
Va.								
Wash.								
W. Va.								
Wis.								
Wyo.	1	9	10	168	165	— 10	+ 2	19
V. I.¶	1	1	0	15	9	+....	+ 44	15

††All figures are preliminary. To insure proper comparisons, 1959 figures cover the same reporting period as those for 1960.

*Less than .5%.

**Death and injury totals cover reports for all months indicated in this column.

#Death totals and changes differ from national figures because those shown here are based on the states and months for which injury data are reported.

***Injury figures not completely comparable due to change in reporting dates.

¶Virgin Islands.

THE SAFETY LIBRARY

By Lois Zearing, Librarian, NSC

Accidents

Deaths down, seventh year injuries decreased. *Chicago Traffic Safety Review,* Jan., 1960. p. 1, 2 and 4.

Traffic accident experience, before and after pavement edge line painting. June 1, 1959. 5pp. Processed. Illinois Division of Highways, Bureau of Traffic, Springfield, Ill.

Automobiles

Safe-proofing auto passengers: Here's how to save lives and reduce injuries through better 'packaging.' *Journal of American Insurance,* Feb., 1960. p. 24-26.

Color

Design and color of pavement markings at no-passing zones. *Traffic Engineering,* Jan., 1960. p. 44-45.

Effect of color and location of observation car when conducting speed checks. J. E. Wilson and D. C. Chenu. *Traffic Engineering,* Jan., 1960. p. 46.

Drivers and driving

Handbook for the Federal Vehicle Driver. General Services Administration. 1959. 42pp. Superintendent of Documents, Washington 25, D. C. Price 25c.

(A guide to everyday operation and advice about driving both under normal and difficult conditions.)

Heart disease and motor vehicle accidents. Harold Brandaleone. *Journal of Occupational Medicine,* Feb., 1960, p. 76-79.

(Gives factors to be considered in evaluating the cardiac driver, with recommendations to physicians and a discussion of the various types of heart diseases.)

Hodgepodge on the highways. *Journal of American Insurance,* Feb., 1960, p. 8-9.

(Driver license examinations are a jumble of conflicting standards, gaps and inadequate screening. Illustrated table showing requirements.)

Pennsylvania to require physical exams for all drivers. *Automotive News,* Feb. 22, 1960, p. 16.

(New laws include periodic physical reexamination of all drivers.)

Enforcement

Charging murder for homicide caused by reckless driving. Robert L. Donigan and Edward C. Fisher. *Traffic Digest and Review,* Feb., 1960, p. 17-19, 36-40.

A police chief looks at the traffic court. Don R. Derning. *Traffic Digest and Review,* Feb., 1960, p. 13-14.

(The part the judge plays in the reputation, training and morale of the court.)

Traffic courts: the judges' responsibility. Gerald S. Levin. *American Bar Association Journal,* Feb., 1960, p. 143-146, 223-224. (Condensed from address delivered before the University of California Traffic Court Conference, 1959.)

Exhaust gas

U. S. has some doubt about exhaust device. Wm. Ullman. *Automotive News,* Feb. 15, 1960, p. 10.

(U. S. Public Health Service contends device being used on automobiles by automobile manufacturers is not sufficient to solve air pollution problem.)

Grade crossings

Highway tanker curbs urged. *Railway Age,* Mar. 7, 1960, p. 36.

(Cites incidents where tankers and trains have resulted in hair-raising situations.)

Rail-Highway Grade-Crossing Accidents: for the year ended, December 31, 1958, 1959. 33pp. Interstate Commerce Commission, Bureau of Transport Economics and Statistics, Interstate Commerce Bldg., Washington, D. C.

Highways

Curb heights and car doors. Douglas J. Carmody and George Eral. *Street Engineering,* Feb., 1960, p. 40-42.

Interstate clearances: 16 feet. *Engineering News-Record,* Feb. 4, 1960, p. 23.

(New clearance standards for bridges under design and some bridges under construction on interstate highways.)

Modesto's one-way streets. Douglas J. Carmody. (2nd year Report). *Street Engineering,* Mar., 1960, p. 26-28.

(Combined educational efforts cut in half left-turn—from-central-lane accidents.)

New standards—same price tag? As Congress starts probe of road program, BPR issues new standards that change bridge clearances, change interchange spacing and change lane requirements. *Engineering News-Record,* Feb. 11, 1960, p. 21-23.

The state and community role in street and highway safety. David A. Bryan. *AAMVA Bulletin,* Jan., 1960, p. 8-9. (The President's Column)

(This is a warning if the state and local governments do not move faster in the field of highway safety the federal government may move in and take the lead.)

To Page 50

The BORKENSTEIN BREATHALYZER

"strengthens the hand of the LAW!"

Scofflaws, or their attorneys, cannot flout the testimony of the BORKENSTEIN BREATHALYZER. This instrument is quick, accurate and foolproof, providing a permanent, unalterable record—with fingerprint—for documentary evidence in court. It is an infallible means of conviction—or exoneration—in suspected "under-the-influence" cases.

The BREATHALYZER was designed by an internationally known authority on chemical breath testing, Professor Robert F. Borkenstein, Chairman of the Department of Police Administration, Indiana University—formerly Director of the Indiana State Police Laboratory.

The unit is easy and inexpensive to operate, requires little maintenance, and its simple principle and design are readily understood when explained in a court room.

Send coupon for information or free demonstration.

STEPHENSON CORPORATION

RED BANK NEW JERSEY

STEPHENSON CORPORATION, Red Bank, New Jersey

☐ Please send me Bulletin "J-26"

☐ Please arrange for demonstration

NAME_____

TITLE_____

STREET_____

CITY_____ STATE_____

Circle Item No. 5—Reader Service Card

In-Between People

From Page 19

close second was the feeling that police "have it in" for teen-agers and look away from adult violators.

Fourteen per cent saw tremendous holes in the traffic engineering program (admittedly Lake Charles' greatest weakness). Five per cent asked that driver education be made compulsory in high schools, another 5 per cent lashed out at improper parking as an accident cause, and there was scattered criticism of car design, inadequate traffic laws, and lack of courtesy by motorists. Some said licensing examinations were too lenient.

The most challenging comment on license renewal was this from a 13-year-old boy who still had a year to wait before qualifying for a motor scooter license and two years for an automobile drivers' license:

"I do not believe that any state is honest with its people when it collects revenue on the pretense of renewing the drivers' license. All that is required for renewal is a valid license about to expire and $2. If a driver has qualified for a license, and nothing further is required of him at any time, then the license should be valid for life, unless revoked for violation of some traffic law."

This boy, who paid a fine because he had no license to surrender, added, "Any person's real drivers' license is in his heart and mind, and not in his hip pocket."

One teen-age suggestion has brought action by the city's traffic commission—that publicity be given to stop sign locations prior to enforcement.

It has become obvious to the local safety organization that educational emphasis must now be upgraded in certain areas.

Already begun is the organization of Youth Safety Councils in the 19 public and non-public high schools of Calcasieu Parish (county). Through them we can combat in a positive manner the notions that teen-agers "don't have a chance," that they must "prove" themselves through racing, or that safety is for sissies. Greater recognition of teen-age achievement in safety is one logical approach. Another is to bring the drag strip undercurrent out into the fresh air of public debate, and the local newspaper editor has already agreed to cooperate in this.

Judge Anderson has been answering each teen-ager with a personal letter that goes into the points brought out by the essay. On the matter of attitudes toward police, however, the Judge has felt that more can be gained by talking this over in person and attempting to explain to the young people just what the police are trying to accomplish. He has extended personal invitations to the juvenile traffic court alumni to discuss these problems, and many have gone away with a more mature outlook toward the total traffic safety effort.

Providing teen-agers with an outlet for free expression on traffic safety, it is hoped, will also give parents and officials a more mature outlook on the very real problems of the young, as well as a basis for an action program to meet the challenges the young drivers have put squarely before us.

Hydramite
HYDRAULIC BRAKE DUAL CONTROL
(PATENT PENDING)
recommended for your Driver Training Program!
HYDRAMITE division of Stromberg Hydraulic Brake & Coupling Co.
5453 Northwest Highway, Chicago 30, Ill.
Savings!
First cost is your last cost.
Fits all cars including those with power brakes, easily transferred year after year without alterations.
Safety!
Allows instructor plenty of leg room—no fumbling for pedal. Each pedal operates independently. Positive hydraulic application.
No bars or cables to confuse the student. No disturbing noise, rattles or squeaks.
Satisfaction!
Now completely accepted in high school and commercial driver training programs.
Send Now!
Order Hydramite now. Complete with approved automotive fittings and easy installation instructions, $32.35 plus 8% Federal Excise Tax

Circle Item No. 6—Reader Service Card

Saturation Patrols

From Page 13

and the concentration of marked cars, each operation netted a large number of arrests.

An average of 1,500 cars were checked during each weekend special operation, resulting in an average of 50 citations and 150 warning tickets issued—for not only were drivers tagged for traffic violations, but for equipment violations as well.

The main objective of these operations was rated a success—that of reducing traffic accidents. Only one minor accident occurred in the critical areas during all eight check periods. Traffic engineers are making studies to determine how widespread and lasting the effect will be in those areas.

One gratifying result—pleasing to all of us—is the acceptance by the average motorist of the need for concentrated enforcement and the need for the work of the traffic officer who must occasionally inconvenience him. Gratifying, too, were the encouraging nods of editorial heads writing and talking in our principal news media, as well as the approval of local automobile clubs.

An editorial in the *Minnesota Motorist,* our AAA publication, gave this picture of the operation:

"Last month the highway patrol and several cooperating law enforcement agencies applied 'intensified enforcement' for one weekend to the 50 miles of highway in Minnesota which claims the distinction of having more traffic accidents than any other stretch of road in the state. . . .

"You'll note that we referred to it as 'intensified enforcement,' which it is, and not as a 'crackdown,' which it isn't. . . .

"AAA representatives met with highway patrol officials to find out exactly what the operation was and how it was conducted. Not only were the patrol officials happy to explain the plan, they invited us to send representatives to one of the 'briefings' which always precede the operation. They even suggested that our representatives ride in one of the patrol vehicles to observe what happened. We accepted the invitation, and our representatives were very favorably impressed by the conduct of the whole operation.

"The idea of the plan is to create an awareness of traffic law enforcement in action, not to make wholesale arrests. As evidence, during the weekend operation on Highways 7 and 12, patrolmen helped more motorists in trouble than they issued arrest tickets. And the number of warning tickets was more than double the number of arrests.

"Now look what happened in accident prevention. The two stretches of highway under surveillance have an average of 30 accidents per weekend, but on this particular weekend only one property damage accident occurred. . . ."

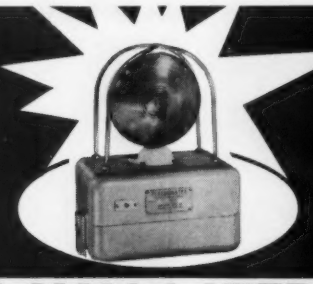
The *Minneapolis Star,* largest daily in the upper midwest, came forward with this editorial comment: ". . . there should be a gain from the cooperative effort of state patrolmen, deputy sheriffs, and law men of nearly a dozen communities . . . and the personal contacts should lead to better observance of highway laws and rules."

To me the greatest favorable result from these concentrated operations, in addition to the very gratifying reduction in traffic accidents, was the decided improvement in the working relationships among the various enforcement agencies. Minnesota's highway patrol officers are restricted to enforcing traffic regulations on the trunk highway, while other county, town and community officers enforce those regulations on their respective routes. Former unavoidable frictions and jealousies were dissolved in the few hours that these men worked together in their common goal of accident prevention.

The operations, too, proved that concentrated enforcement activities in areas of high accident frequencies can and do result in a great reduction in accidents with their resultant losses of life and property. Despite the heavy publicity given in advance and during the operations, the effect of having a well-marked officer's car every two or three miles was an even greater deterrent to hazardous driving behavior.

In Minnesota, the "saturation patrol" has been a big step toward selling a strict and fair enforcement policy and making Mr. Motorist like it.

ROAD BLOCK LIGHTS



CARPENTER FLASHMASTERS

SPECIALLY DESIGNED FOR TODAY'S HIGH-SPEEDS

Illustrated at top of ad is Type NXA-7 with huge 8" lens and transistorized circuit for new high in significant light output. Above, NXA-360 for 360° coverage.

SEND FOR COMPLETE SPECIFICATION SHEET

dealer and rental agency inquiries invited

ENTIRELY NEW DESIGNS

Built to give the most light for the least money . . . initially and over the years. Cuts bulb replacement, battery changes, and servicing down to new lows . . . brings warning impact and performance to new highs!

TWO COMPLETE LINES

Choose the best types for your specific needs . . . unique transistorized neon-lamp units for highest power or economy types to withstand rugged use and abuse. One-way, two-way, and 360° coverage types . . . automatic and radio controls available.

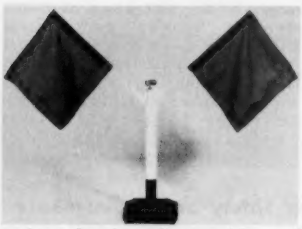
CARPENTER MFG. COMPANY

627 Bradley Street, Somerville 45, Mass. Telephone MOnument 6-4300

Circle Item No. 7—Reader Service Card

NEW... SAFETY EQUIPMENT

Publication of product announcements in this section should not be construed as endorsement or approval by the National Safety Council.



Traffic Control Device

"Traffic Island" is a traffic control device of all-steel construction with a heavily weighted, non-slip black base. The main tube is yellow with optional reflectorization. The red cap at the top of the tube is removable to permit storage of the two 16 x 16 in. warning flags. A flasher may be installed for night time use. The height of the tube is 26 in.

West Side Iron Work, Inc., 327 Front Ave., N. W. Grand Rapids 4, Mich. (Item 41)

Dual Ignition Switch

"Stall-It" is a portable dual ignition switch that is controlled by the driving instructor while teaching. It allows the instructor to control excessive acceleration at the touch of a button without removing his eyes from the road.

The switch can be used with power brakes and steering and the switch must be reactivated to restart the engine after stalling. This prevents accidental restarting. It increases brake life as there is no braking against engine thrust. The hand grip is comfortable to hold and has a push button on-off switch.

Circle Safety Devices Co., 2363 S. Robertson Blvd., Los Angeles 34, Calif. (Item 42)

Fluorescent Lighting Fixture

A new line of outdoor fluorescent lighting fixtures illuminates streets, expressways, shopping centers and service stations.

The aluminum, fully-weatherproofed fixture, called the "Broadstreeter," is designed to provide more light per watt with less glare. The new luminaire emits good color rendition with a low glare factor, and is available in 4 and 6 foot sizes. The aluminum body is heliarch seam welded to cast aluminum ends, and the gasket-sealed acrylic diffuser creates a rust-proof and bug-proof fixture. The parabolic reflector is of polished aluminum.

The "Broadstreeter" has a low maintenance cost. It is a 110-125 volt, 60 cycle operation, and is available for operation on other voltages. The units are union wired.

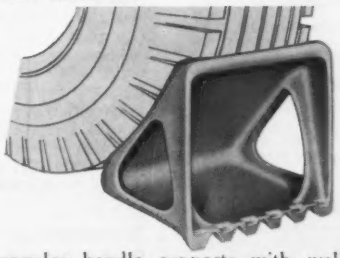
Metalcraft Products Co., Inc., (Mascher and Lippincott Sts.) Philadelphia 35, Pa. (Item 43)

Glo-Pen

The SCRIBA-LUX is a pen with a built-in light that gives a three inch circular beam around the point. It is especially designed for state police, policemen, emergency personnel, doctors and others who write or take notes in subdued light or total darkness.

To write, the plunger is pushed down. A second push turns on the light. The pen is slightly larger than a regular pen, and weighs less than 2 ounces, it has a metal barrel with a gold tone finish and a black top and bottom. Batteries, bulbs and ink refills are available. The Glo-Pen is made in Germany and fully guaranteed.

Sara-Kay Imports, 106 White Drive, Tallahassee, Fla. (Item 44)



Safety Wheel Block

Increased pavement gripping ability, a redesigned face for better tire conformance and greater strength and sturdier angular handle supports with well rounded edges for easier handling are features of this safety wheel block.

Model WB2H block maintains the same structural shape as the previous model but the two outermost calks have been made slightly longer than the rest. This provides instant grip action as soon as pressure has been exerted on the block. As the load increases the middle calks also engage the pavement to a positive holding position.

The block will hold heavy trucks, trailers and other vehicles, especially when the vehicles are loaded by fork trucks and there is the possibility of the vehicle moving away from the dock.

Calumet Steel Castings, Corp., 1636 Summer St., Hammond, Ind. (Item 45)

Traffic Engineering Services

This firm of Consolidated Traffic and Transportation Engineering Service with headquarters at 1118 N. Harding Ave., Chicago 51 announces the availability of services in the fields of traffic engineering, mass transportation, parking lot planning and traffic surveys.

The services are designed to cope with the radical changes in traffic patterns that are resulting from accelerated highway construction programs in the middle west. Congestion and accidents will result if engineering remedial measures are not determined.

SAFETY PRODUCT LITERATURE

Traffic Buttons

Fasten Traffic Buttons and Curb Markets to pavement permanently and without conventional, time-consuming troublesome steel doweling. Thiokol Chemical Corp., 780 N. Clinton Ave., Trenton, N. J. Literature gives full story on its use for other highway applications.

For more details circle No. 81 on enclosed return postal card.

Sound Cameras for Law Enforcement

The Auricon 16mm Sound-On-Film cameras described in a new catalog, are designed for specific requirements of police chiefs, district attorneys and other law enforcement officials who have need for conclusive motion picture evidence for their work. For a copy of the catalog, write Berndt-Bach, Inc., 6950 Romaine St., Hollywood 38, Calif.

For more details circle No. 82 on enclosed return postal card.

Municipal Supplies Catalog

Communities of every size will find much to meet their municipal needs in the 120-page Municipal, Police, Signs, Supplies Catalog No. 104 now being offered by Sargent-Sowell, Inc., 1172—107th St., P. O. Box 868, Grand Prairie, Texas.

For more details circle No. 83 on enclosed return postal card.

Truck Safety Accessories

Catalog A-4059 describes truck safety accessories. The 28 pages of reflectors and lamps, rear view mirrors, flares and flashers are conveniently indexed on the front cover. The Grote Mfg. Co., Inc., Bellevue, Ky.

For more details circle No. 84 on enclosed return postal card.

Helicopters for Municipalities

Helicopters for traffic control, fire department use, and disaster relief are among topics covered by a 12-page booklet released by Hiller Aircraft Corp., Commercial Division, 1350 Willow Road, Palo Alto, Calif. The booklet also reveals how eligible communities pay only half the purchase price for Hiller 12E's under Federal Office of Civil Defense and Mobilization purchase plans.

For more details circle No. 85 on enclosed return postal card.

Pedestrian Traffic Signal

This larger, brighter, more readable traffic aid has 37 per cent more effective lens area. It is ideal for crossings 50'-60' wide —residential areas, school crossings, small shopping areas. Bulletin 2716 contains complete information and specifications on the MP-120. Crouse-Hinds, Syracuse, N. Y.

For more details circle No. 86 on enclosed return postal card.

Signs and Markers

Lake Shore Markers, Inc., 654 W. 19th St., Box 59, Erie, Pa., has available a sign catalog, which includes a fine grade of permanent historical, professional and municipal street signs and golf course and cemetery markers.

For more details circle No. 87 on enclosed return postal card.

Counts Cars

Chekah, the ultra-sonic vehicle detector, notes all cars entering a lot or a garage and gives information on space availability. Installed overhead, it is away from vandals and pavement hazards. In addition, it can count vehicles and can be used to actuate traffic signal controllers in a given lane to operate gates and ticket dispensers in parking areas. General Railway Signal Co., P. O. Box 600, Rochester 2, N. Y.

For more details circle No. 88 on enclosed return postal card.

Police Motorcycles

Large and small communities are finding that the officer mounted on a motorcycle is a more flexible law enforcing agent—in emergencies, criminal apprehension, spot traffic control. A new brochure available from the Harley-Davidson Motor Co., Milwaukee 1, Wisconsin, will give you a closer look at law enforcement with motorcycle-mounted officers.

For more details circle No. 89 on enclosed return postal card.

Transistorized Public Address Radio Amplifier

Road Commander Model RC-1225 delivers a crisp, clear audio signal, requires no warm up and is approved for purchase under the OCDM matching funds program. Output is 25 watts on 12-6 volts; input provision for two-way radio allows it to amplify messages outside of vehicle. Lawrence, Inc., P. O. Box 5106, Seven Oaks Station, Detroit 35, Mich.

For more details circle No. 90 on enclosed return postal card.

Luminaire for Highway Markers

Bulletin 300-21 gives full information on Fluoresign, an outdoor fluorescent luminaire that contributes to safety and driving convenience by providing high-level, glare-free controlled light for highway signs. It is modular in construction and available for all fluorescent lamp types. Outdoor Lighting Revere Electric Mfg. Co., 7420 Lehigh Ave., Chicago 48, Ill.

For more details circle No. 91 on enclosed return postal card.

Transistorized Two-Way Radio

Bulletin ECR-666 describes how small size makes possible a wide variety of positions in which two-way radio equipment may be mounted in cars and trucks. Charts show the low power required from the car's battery by the unit which uses only 0.04 amperes on "standby" (with the engine off)—less drain than the power required by an automobile clock, which runs continuously. General Electric Communication Products Dept., Section 120, Lynchburg, Va.

For more details circle No. 92 on enclosed return postal card.

Protect Safety and Maintenance Crews

Current literature from Industrial Products Co., 2850 N. 4th St., Philadelphia 33, Pa., describes and illustrates a full line of fluorescent high visibility safety equipment, that includes warning flags, safety vests, plastic barrier ropes, hard hat covers and safety cones—geared to increase the safety of working crews.

For more details circle No. 93 on enclosed return postal card.

Police Car Catalog

Three new police cars—the Petroller 6 for city work, the Patroller Special 8 for city and suburban use, the Pursuit Special 8 for highway and turnpike patrol—and police emergency wagons are detailed in the new Plymouth Police Car Catalog, available from Plymouth Motors Corp., 6334 Lynch Road, Detroit, Mich.

For more details circle No. 94 on enclosed return postal card.

Highway Signs

Traffic and safety signs of every description—stop, speed limit, parking, directional, barricade, flashers, warnings—are the subject of a new folder released by Eastern Metal of Elmira, Inc., 121 Harrison St., Elmira Heights, N. Y., which makes a complete line of reflectorized aluminum and steel traffic and safety aids.

For more details circle No. 95 on enclosed return postal card.

Emergency Light Guidebook

Over 100 powerful, dependable and durable warning vehicle, panic and hand lights are illustrated and described in this complete line emergency light catalog offered by Carpenter Mfg. Co., 625 Bradley St., Somerville 45, Mass.

For more details circle No. 96 on enclosed return postal card.

For Better, More Economical Street Signs

Minnesota Mining & Manufacturing Co., St. Paul 6, Minn., has made available information on an automatic sign applicator that can be used by municipal crews to refurbish traffic signs, reflectorize street name signs, and make bridge markers more quickly and at lower cost.

For more details circle No. 97 on enclosed return postal card.

Seat Belts

From Page 15

the webbing (see figure 1). The metal to metal buckle provides a positive metal interlock (see figure 2).

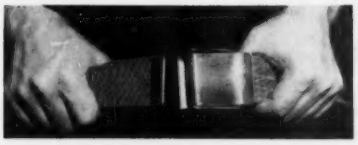
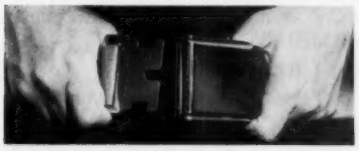


Fig. 1, above; Fig. 2, below.



Originally the metal-to-metal buckle was the only one specifically approved by the GSA. Now, however, the cam type is allowed by the specifications if it can pass all the requirements. The great majority of cam designs cannot pass this specification because of the higher strength levels. The average cam type buckle will develop about 4,500-4,700 pounds total loop load and about 3,600 pounds in the webbing. This exceeds the SAE requirements but falls slightly short of the GSA requirements.

Each type of buckle has its advantages and disadvantages, but the injury reducing, life saving potential of belts per se is so large that a discussion of the relative merits of these two types is practically academic. To worry or confuse the public with such a matter is absurd. The National Safety Council, the U. S. Public Health Service and The American Medical Association, among others, recommend that belts meet the minimum requirements of the SAE's recommended practice.

The Acid Test

There has been a feeling among some engineers that the strength requirements of the SAE practice were more than adequate since the period during which the peak force is applied to a belt in actual collisions is quite short, when compared to the duration of the force in testing. Test loads are applied up to three seconds whereas actual loads occur for small fractions of a second.

In June of 1958 TRAFFIC SAFETY reported on a research study which tends to confirm this theory. The data were taken from the files of Cornell University's Automotive Crash Injury Research Program. Investigation of 712 belts used in collisions showed only 11 failures of any kind. Further, in only three of these cases was there clear cut evidence of structural failure of the belt itself. In the other nine, there were cases of improper threading of belt both to the anchorage and the buckle, shearing of the webbing or the anchorage by the intrusion of an obstacle into the passenger compartment, and other unusual circumstances.

In these 12 cases of belt failure there were three fatalities, one of which occurred in an accident classified as "non-survivable." All three involved ejection from the vehicle.

The consumer has the same opportunity to insure that the safety belts he buys meet the requirements of the SAE recommended practice as he does for other auto accessories. SAE has prepared recommended practices for brake fluid, brake linings and many other automobile parts and accessories.

1. The Automobile Safety Belt Institute, a trade organization of belt manufacturers, specifies that belts meet or exceed SAE requirements as a prerequisite for membership. Not all seat belt manufacturers are members of this organization. The address of the Institute is 111 West Washington Street, Chicago, Ill.

2. Some manufacturers state on the box containing the belts that the belts meet SAE requirements. Others say the same thing in their advertisements. At least one imprints the designation S.A.E.—SBA4 on the belt buckle. A manufacturer places the integrity of his company on the line when he does this. Should the belts not meet the requirements as stated he might be liable for lawsuits of considerable magnitude. The customer should rely on reputable manufacturers and dealers.

3. Several states have adopted the SAE practice into their legislation on belts (Pennsylvania, Michigan, Virginia and Washington). Not all require actual certification, however. California has prepared its own standard.

A reasonable degree of prudence on the part of the consumer should result

Turn Page

Driverlab

The most modern laboratory for testing and training today's drivers. Includes all *SEVEN* important psychophysical tests.

Driverlab

Tests for reaction time, visual acuity, depth perception, color vision, field of vision, glare resistance and night blindness. *LESS* testing time is required. Its separate units can test up to *FOUR* persons at one time.

Driverlab

The most versatile equipment on the market for continuous and/or multiple testing in community or organizational driver programs. Being portable its quick to set up and easy to use. Examinees receive their own reaction time chart and individual score sheet showing test results.

Driverlab

is a pioneer in testing devices and is used universally by all types of organizations in their safety programs. A twelve year research and development period has made it the most efficient and accepted testing equipment available.

Driverlab

Lowest priced on market. FOB factory. Additional information is available on DRIVERLAB and other educational products upon request.

EDUCATIONAL DEVICE CO.
Suffern, New York

NAME_____
TITLE_____
ORGANIZATION_____
ADDRESS_____
CITY_____ STATE_____

Circle Item No. 8—Reader Service Card

in the purchase of a quality belt. *Caveat emptor*—let the buyer beware.

Children—A Difficult Problem

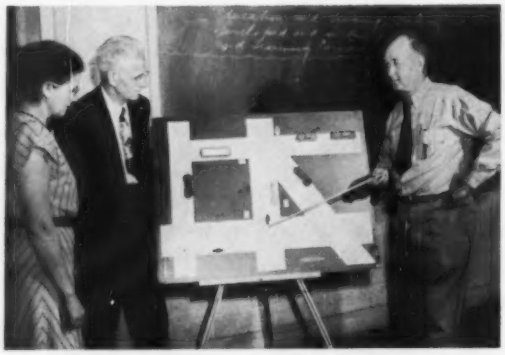
Much space has been used in current publications to discuss seat belt standards—a problem which is no problem at all. As far as the adult is concerned we have standards that adequately protect him. What we need is similar protection for the young child.

How to properly restrain the small child in an automobile presents a real problem. I refer to the child who is too young to effectively use an adult belt. Many devices have been proposed and marketed ranging from harness and vest arrangements to car seats. The value of these devices is a question mark. There is little doubt that few are designed for crash conditions, but rather are intended as a method of keeping junior out of mom's way.

The SAE group recently appointed a subcommittee to investigate the feasibility of preparing a recommended practice for children's restraining devices. After studying the problem, the subcommittee reported that there is lack of knowledge on which such a practice can be based. Research is needed on the mechanical and medical aspects of the problem. Let's hope that such research will be forthcoming.

Safety Belt Sales Rise

The recent consumer's publication also indicated that the seat belt is vanishing from the scene. Far from it—the Council recently reported that sales in the first three-fourths of 1959 more than doubled the entire year of 1958. The trend has continued during the first three months of 1960, only at an accelerated rate. This has been a steady and healthy growth, month by month, and the outlook for the future is bright.



THE "EYES" HAVE IT . . . .

Here is an aid that has proven practical in teaching visually the principles of safety. It's simple, effective and works wonders in teaching your drivers.

The MAGNO SAF-T BOARD is the result of studies by outstanding safety instructors and engineers. Safety directors, traffic managers, driving instructors, insurance agents and adjusters get a clear picture of how accidents occurred visually by reconstruction of conditions.

It is now being used from coast to coast by fleet owners, insurance and public utility companies, colleges and schools, and many other concerns interested in public safety. Consisting of a BOARD with typical street intersections on one side. The other side is a BLACKBOARD on which any street or road situation can be drawn with chalk and then erased. It has scale models of vehicles, traffic markers and accessories that can be placed in any conceivable traffic situation.

Write for our folder. It contains full information.

MAGNO SAF-T BOARD© EMIGSVILLE, PA.

Circle Item No. 13—Reader Service Card

Traffic Programs

From Page 10

question that traffic safety programs pay big dividends, and that such activities should be considered an investment.

Driver education is no "frill"

Some principal reasons for continued support of high school courses in driver education are:

1. High quality courses have been demonstrated to contribute substantially to the strength of our country through:
   a) preservation of life;
   b) preservation of unmaimed manpower;
   c) reduction of waste of economic goods;
   d) the fostering of good civic attitudes, self-discipline, and social responsibility in youth;
   e) broader understanding of rapidly changing needs in transportation and traffic—a major and ever-expanding area of national and world-wide concern.

2. The above nationally important values will result only when such instruction is given:
   a) as an integral part of the school curriculum;
   b) at the grade level just prior to coming of age for driver licensing;
   c) as a generally "liberalizing" area of education—planned and presented, not merely to teach the mechanics of driving, but to develop socially responsible American citizens;
   d) by certified teachers with specialized preparation, interest, and ability.

A driver and traffic education course with the above goals and high standards is not an educational "frill." It is, on the contrary, a promising means of building up a defensive shield against the weakening and intolerable national waste and misery from needless traffic accidents, delays and inefficiencies.

Seven Unsolved Problems

Those of us in traffic safety work freely admit at least seven serious unsolved problems. These are the *same*

problems that were with us 5, 10, 15 and even 25 years ago. These are the areas that must have our immediate and best attention. I refer to:

More Unfit Drivers

In Detroit alone, the psychiatrist found in 20 years, after examining 10,000 licensed drivers: 100 committably insane, 850 feeble-minded, 1,000 had been in mental institutions.

In Ohio, the head of the Driver Licensing Division found 600 licensed drivers receiving checks for the blind from the state. These licenses have now been revoked.

Suggested solution

Conduct a more rigid examination when an applicant applies for a driver's license.

Put all new drivers, regardless of age, on a two-year probationary period.

Conduct periodic re-examinations for all licensed drivers once every three years.

If a driver has two or more moving violations or accidents in any 12-months period in which he is responsible, require him to appear immediately before a board of examiners to show just cause why he should continue to drive.

Require all applicants, regardless of age, to present a certificate indicating that they have completed in a satisfactory manner an approved driver education course, (both classroom and practice driving), before being allowed to take the test for a driver license. Michigan and Connecticut now require this of the 16 and 17 year old youths.

Legalize the use of radar to remove from the road the habitual speeders who are considered unfit to drive.

Increase in Unfit Vehicles

The most recent national campaign to, "Check Vehicles and Check Accidents," revealed that 20 per cent of more than three million vehicles checked had one or more things wrong mechanically. Some of these defects were serious enough to make the vehicles unsafe to operate.

Suggested Solution

Inaugurate compulsory periodic inspection of motor vehicles.

Start a rigid spot-checking system of vehicle condition.

Inadequate Roadways

We have embarked on one of the most gigantic public works programs this nation has ever known, a $33 billion road building program.

Do we need such roads? Here are two statements from officials of our Public Roads Administration:

a) We have roadway facilities to move safely and efficiently today only 33 million vehicles, but we have about 68 million registered vehicles right now, and expect a registration of 99 million by 1970.

b) Fifty per cent of our roadway facilities are too narrow.

Need I say more?

Suggested Solution

We must be willing to pay the price in taxes for not only this federal network of improved highways but for all feeder roadways.

Inadequate Enforcement

I want to make it very clear that I am not saying "poor enforcement." I am saying "not enough enforcement."

Suggested Solution

Every citizen must back fair, impartial, intelligent and adequate enforcement in his community and state.

Increase in Devil-may-care Attitude

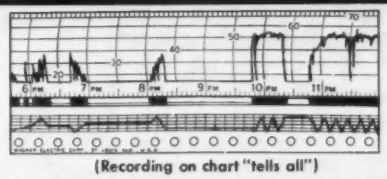
Many drivers and pedestrians are not aware of the seriousness of their acts when behind the wheel or on foot, acts which can easily get them into traffic trouble.

Suggested Solution

I believe the first step is to assign a psychiatrist to the traffic division of every police department, to find why some drivers do the things they do. When communities have this information, they can start using selective education to help improve these drivers, or take steps to stop their driving.

I think, too, we must emphasize the need for parents to set a good example in traffic for our children. This

UP TO 31 DAYS RECORDING
on a single "strip" chart



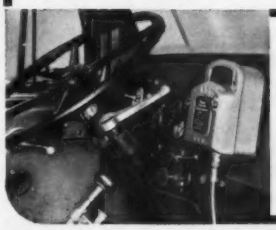
(Recording on chart "tells all")

NEW WAGNER SANGAMO TACHOGRAPH

graphically records truck operation

Mounted on the dash of a truck, this new type of recording speedometer permanently records vehicle operation up to 31 days on a single "strip" chart . . . graphic recording on chart indicates time truck engine started, time engine idled, starts, stops, speeds and distances traveled.

Information recorded on chart helps you plan better routing, control speed, and lower operating costs by encouraging safer driving and savings in time, gas, oil and tires . . . For details, mail the coupon.



Wagner Electric Corporation
6467 PLYMOUTH AVE., ST. LOUIS 33, MO., U.S.A.
Send FREE copy of Bulletin SU-140.
Name_____
Company_____
Address_____
City & State_____
We operate_____vehicles. WS60-7

Circle Item No. 9—Reader Service Card

Circle Item No. 10—Reader Service Card

Incon's STROLMETER has time-saving and safety features heretofore never realized in conventional measuring devices. It is an accurate, compact instrument used in police accident investigation.

A simple compact device with which one man may measure distance quickly without creating a traffic hazard. In accident investigation this instrument is without equal.

1,000 ft. Meter.....$17.50
Quantity prices on request.
FOB Hayward, California

INCON INC.
BOX 33
SAN LORENZO, CALIFORNIA

SCHOOL SAFETY!

. . . YOUR CHILDREN'S SAFETY is our BUSINESS

GRAUBARD'S Equipment is nationally known as the school safety equipment "That Promotes Safety." It does this by fulfilling both of the conditions essential to a really effective Safety Patrol.

FIRST, it gives each patrol member a definite sense of reponsibility and a pride in doing his job well.

SECOND, being "Standard Equipment" it is recognized by school children and motorists alike, assuring their respect and cooperation.

Write today

for 1960 Catalog and Complete information and prices.

GRAUBARD'S
236 HIGH STREET
NEWARK 2, NEW JERSEY

Circle Item No. 11—Reader Service Card

is the time to start to develop good driver attitudes.

I also believe we should establish traffic schools in all of our communities so drivers have an opportunity to learn about traffic and driving. These can be administered by police departments, public schools, automobile clubs, or safety councils.

Personal Problems

Many drivers have family worries, financial problems, job worries and other problems that greatly and directly affect their ability to drive.

Suggested Solution

Everyone has periods of stress and anxiety. We have to impress and teach people to learn to know themselves better and to control such situations when they are behind the wheel of a motor vehicle. Our psychologists are working to find solutions for this basic cause of many accidents. We must encourage research study here, and create in all drivers a sense of awareness that personal problems and anxiety are accident-breeders and must be put aside in favor of concentration on the business of driving.

I strongly urge that we do not encourage the greater use of tranquilizers. The use of such drugs when driving is dangerous.

Drinking and Driving

The problem of drinking and driving is far worse than most of us are willing to admit. Among drivers in fatal accidents in 1958 for whom condition was stated, 21 out of 100 had been drinking. All of the tests I have personally been privileged to observe revealed that not one individual's driving improved after drinking, but got consistently worse. The problem of the drinking pedestrian in traffic is serious too.

Suggested Solution

I recommend that more states and communities legalize the use of chemical tests for intoxication. We now have the technical "know-how" to measure the amount of alcohol in the blood stream that makes the driver unsafe to operate a motor vehicle. Let's use this scientific knowledge to a much greater extent. Let's all back police and judges who enforce the findings of such testing.

Yes, we can have safe and efficient operation, if we are willing to pay the price!

ADVERTISER'S INDEX

Carpenter Mfg. Co. 44
Cataphote Corp. ..... B.C.
Educational Device Co. 47
Ford Motor Co. ..... I.F.C.
Graubards, Inc. 50
Incon, Inc. 50
Magno Saf-T-Board 48
National Safety Council ..... 4-I.B.C.
Porto Clinic Instruments Inc. 3
Potters Bros. Inc. 34
Stephenson Corp. 42
Stromberg Hydraulic Brake & Coupling Co. 43
Wagner Electric Corp. 49

Safety Library

From Page 42

License plates

Illinois license plate research concluded: recommendations made after two-year university study. *A.A.M.V.A. Bulletin,* Jan., 1960, p. 1-5.

Signs and signals

Detector location for vehicle-actuated signals. R. L. Gregory. *Street Engineering,* Mar., 1960, p. 20-22.

ADDRESSES OF MAGAZINES MENTIONED

AAMVA Bulletin
504 Hill Bldg.
Washington 6, D. C.

American Bar Association Journal
1155 E. 60th St.
Chicago 7, Ill.

Automotive News
2666 Penobscot Bldg.
Detroit 26, Mich.

Chicago Traffic Safety Review
20 N. Wacker Drive
Chicago 6, Ill.

Engineering News-Record
330 W. 42nd St.
New York 36, N. Y.

Journal of American Insurance
20 N. Wacker Dr.
Chicago 6, Ill.

Journal of Occupational Medicine
28 E. Jackson Blvd.
Chicago 4, Ill.

Railway Age
Simmons-Boardman Co.
Orange, Conn.

Street Engineering
22 W. Maple St.
Chicago 10, Ill.

Traffic Digest & Review
Northwestern University
1804 Hinman Ave.
Evanston, Ill.

Traffic Engineering
2029 K. Street, N. W.
Washington 6, D. C.

Use the READER SERVICE POSTCARDS

- **to obtain information on advertised products**
- **to obtain material on new products and literature**
- **to order subscriptions to TRAFFIC SAFETY**

Here's how to use card #2—the first set of numbers is keyed to products advertised throughout the magazine, the second set to items shown in the New Product section and the third set to the Safety Products Literature section. Simply circle the number of any item in which you're interested and we'll ask the manufacturer to send you full information without obligation. No postage is required when the card is mailed in the United States.

Advertised Products

—are included for your benefit to help you solve accident problems. To get full information on a product in which you are especially interested, circle the corresponding page number on the Reader Service Postcard.

New Safety Equipment

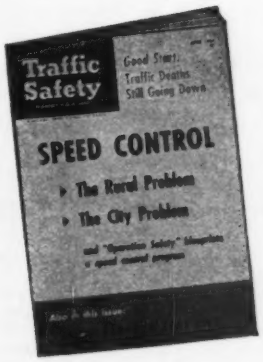
—shown in the special section, has been carefully reviewed. Only new products or newsworthy improvements in existing equipment are considered eligible for inclusion in this listing.

Safety Product Literature

—are catalogs, brochures, spec sheets and booklets describing equipment and services to help you solve your traffic safety problems. You can build a valuable reference file with these free publications.

IMPORTANT—Be sure to fill in your name, organization and address in the space provided on this side of the post card.

1



MAY, 1960

Prices are subject to a 10% discount to National Safety Council Members

	1	2 TO 9	10 TO 99	100 TO 999
Subscription (12 issues) ea.....	$4.50	$4.00	$3.50	$2.80

(Add $.70 per subscription for foreign except Canada and Pan American Union)

U.S. GOVERNMENT INSTALLATIONS NOTE—This item has been approved for purchase by the Federal Supply Service. DO NOT USE THIS ORDER FORM. Refer to "Price list of N.S.C. Materials to U.S. Government Agencies."

Send _____ subscriptions to Traffic Safety (311.01)

In ordering subscriptions for members of your staff attach separate sheet showing names and addresses so that we can send their magazine directly to them each month, without delay.

All prices shown are based on a single order for delivery in one shipment to one destination (one shipment per month on annual subscriptions). Quantities are not cumulative over a period of time, or for a number of locations, to obtain quantity prices.

SEND INVOICE TO: MY ATTENTION ☐ COMPANY ☐

NAME.....

POSITION.....

COMPANY.....

ADDRESS.....

CITY & STATE.....

2

MAY, 1960
(good until Aug. 31, 1960)

PRODUCTS ADVERTISED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

NEW SAFETY EQUIPMENT

41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

SAFETY PRODUCT LITERATURE

81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NAME.....

POSITION.....

COMPANY.....

ADDRESS.....

CITY & STATE.....

The advertising pages of Traffic Safety

. . . your guide to products of importance to your safety program

Keep up-to-the minute on all the latest advances in traffic and transportation safety products and services through the advertising pages and new equipment editorial features in Traffic Safety.

Should you want additional information or special consultation on your specific problems, don't hesitate to write to the manufacturers. They welcome your inquiries and will answer your questions without obligation.

Although the Council does not test or examine the products advertised or mentioned in the editorial features, staff engineers and technicians review all product information in an effort to determine that descriptions and performance claims are accurate. It should not be construed, however, that commercial products are approved or endorsed by the National Safety Council.

FIRST CLASS
PERMIT No. 834
CHICAGO, ILL.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

5c—POSTAGE WILL BE PAID BY—

Reader Service Department

TRAFFIC SAFETY
425 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

FIRST CLASS
PERMIT No. 834
CHICAGO, ILL.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

5c—POSTAGE WILL BE PAID BY—

Reader Service Department

TRAFFIC SAFETY
425 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

Before you mail your Reader Service Postcard . . .

TAKE ANOTHER LOOK AT

- the ADVERTISING pages
- the NEW SAFETY EQUIPMENT section
- the SAFETY PRODUCT LITERATURE section

Make sure that all the items you want to know about are circled . . . check to make sure that your name, organization and address are printed on the reverse side of the postcard . . . THEN mail it today.

ON THE ROAD TO SAFETY WITH...

YIELD RIGHT OF WAY
Sometimes even this is TOO FAST!
Drive according to weather, traffic and road conditions
HILL
RAIL ROAD CROSSING
DEADLY PLACES to pass
DON'T CROWD YOUR LUCK
Follow at a SAFE distance
DANGER LURKS AT BLIND CORNERS
DRIVING PROBLEMS - BIG OR SMALL
KEEP YOUR EYES ON OUR PUPILS
DEMAND ATTENTION - CHECK 'EM ALL
SIX or SIXTY
Courtesy
IS A GIFT YOU CAN GIVE ALL YEAR LONG
A Good Thing to Keep in Mir

DASH STICKERS

mini-sized safe-driving posters that ride right along with your driver

Dash Stickers: Bright safety illustrations and captions that go on the vehicle dashboard — where they do the most good.

Dash Stickers: Easy to apply. Just remove the protective coating and slap on for a sure stick! And it peels off just as easily and quickly.

Dash Stickers: Help to keep bus, truck, passenger-car drivers safety minded. Sold in sets of 12. A new and different sticker for each month. Order sets today.

ORDER FROM—
NATIONAL SAFETY COUNCIL
425 N. Michigan Ave., Chicago 11, Ill.

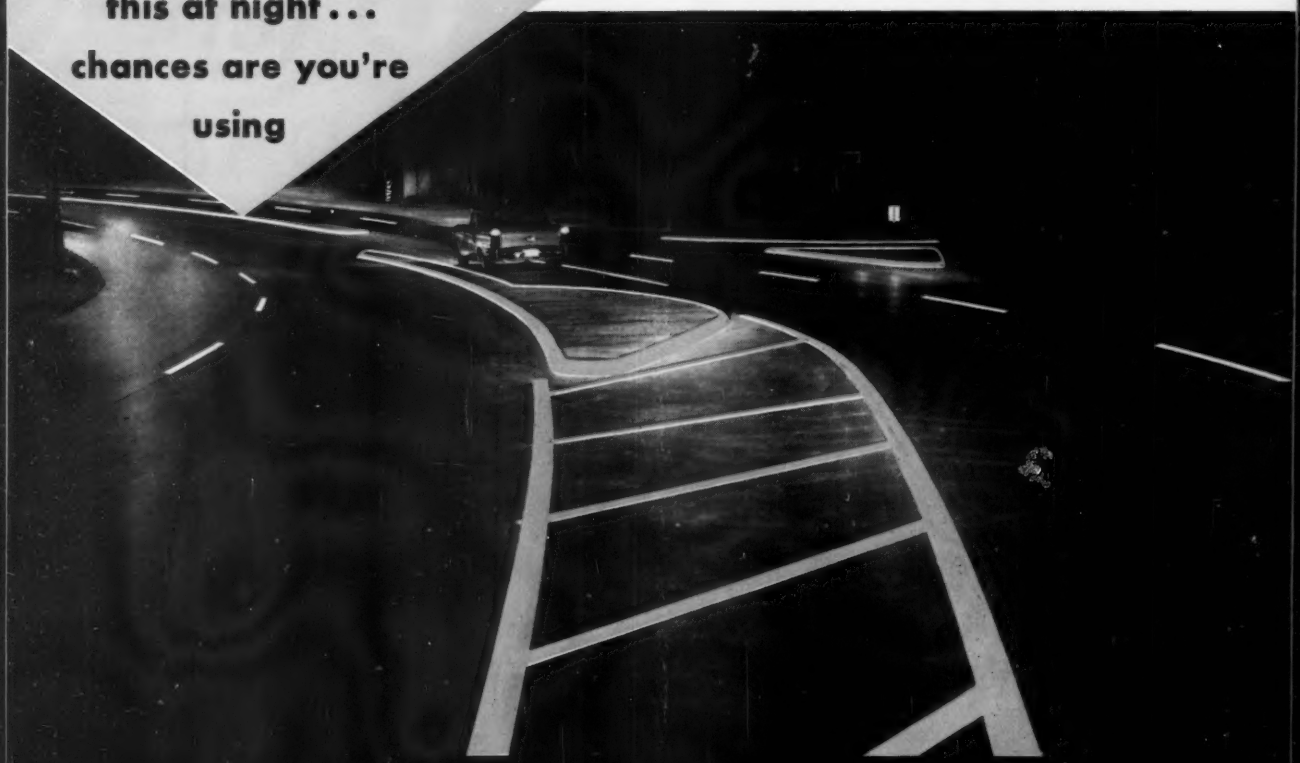
Quantity	*Price Per Set*	
Single	$1.30	
2 to 9	.95	Stock No.
10 to 99	.75	262.60
100 to 999	.66	
1,000 or more	.60	

Sold in sets of 12 stickers. Prices subject to 10% discount to Council Members.

Circle Item No. 12—Reader Service Card ⟶

If your pavement markings look like this during the day...

and still look like this at night... chances are you're using



CATAPHOTE *reflective traffic beads*

Clean bright stripes in daylight . . . brilliance that fairly leaps from the darkness at night . . . here are pavement markings that work full-time. In fair weather or foul . . . you can depend on life-saving protection when you reflectorize with Cataphote Waterproof Reflective Traffic Beads.

Cataphote Beads are easy to use. They may be premixed in traffic paint and applied with any conventional striping equipment. For immediate reflectance, use Cataphote Drop-on Beads in any standard bead dispenser. Regardless of method, you'll be rewarded with increased safety, faster paint drying time and 50% longer "stripe life."

Men who set the trends in traffic control have used Cataphote Reflective Beads for years. Catalog B-160 can help you be a leader, too. Send for it, today.

CATAPHOTE CORPORATION

TOLEDO 10, OHIO / JACKSON, MISSISSIPPI

MANUFACTURERS OF REFLECTIVE TRAFFIC PRODUCTS